Inventor



L2 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2001 ACS
AN 1999:617621 HCAPLUS
TI Bioconjugation without linker or activator to polymer platforms with carboxyl and hydroxy moieties.
AU **Martey, Christine A.**; Gelormo, David J.; **Heindel, Ned D.**; **Longton, Wallace A.**
CS Department of Chemistry, Lehigh University, Bethlehem, PA, 18015, USA
SO Book of Abstracts, 218th ACS National Meeting, New Orleans, Aug. 22-26 (1999), MEDI-247 Publisher: American Chemical Society, Washington, D. C. CODEN: 67ZJA5
DT Conference; Meeting Abstract
LA English
AB Many polymers contg. both hydroxyl and carboxyl residues on their backbone can be internally lactonized without thermal decompn. Such pendant lactones can be opened with nucleophilic pharmaceuticals to achieve degrees of substitution which approach the theor. maxima of one drug per original carboxyl. After model studies opening, with p-methoxybenzyl amine, the lactones of natural "polymers" of mono-carboxymethylated glucose - lactonized by flash-heating in xylene - we extended our studies to the attachment of such pharmaceuticals and biol.-important mols. as mitoxanthone, ellipticine, aminoglutethimide, finasteride, and tocopherol. Creating reactive lactones on the polymer avoids the necessity of using secondary activating adjuvants which leave unused residues on the macromol. Loading levels obtainable by this method with specific pharmaceuticals onto dextran, cellulose, and similar biopolymers and the release kinetics for sample pharmaceuticals will be presented.

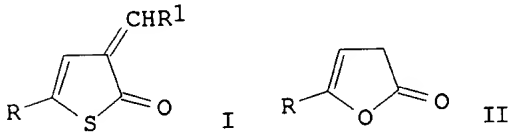
102(a)

L4 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2001 ACS
AN 1998:529836 HCAPLUS
TI Polysaccharide **lactones** as activated carriers for transport and release of therapeutic agents.
AU **Martey, Christine A.; Heindel, Ned D.**
CS Department Chemistry, Lehigh University, Bethlehem, PA, 18015, USA
SO Book of Abstracts, 216th ACS National Meeting, Boston, August 23-27 (1998), MEDI-351 Publisher: American Chemical Society, Washington, D. C. CODEN: 66KYA2
DT Conference; Meeting Abstract
LA English
AB Carbohydrate polymers have long been known for their low immunogenicity in mammalian systems. As such they represent ideal scaffolds for drug transport and controlled release. We have found that at a degree of substitution near unity in carboxymethylated dextran and cellulose, it is possible to generate a reactive **lactone** by thermally-induced intramol. dehydration. These **lactones** capture amine- or hydrazine-contg. small mols. and release these substances upon hydrolysis and/or enzyme action. They thereby serve as useful macromol. carriers of drug candidates. We have prepd. the internal **lactones** of carboxymethyldextran and CM-cellulose and have employed IR carbonyl bands to track the **lactonization** process and subsequent drug-loading. Benzylamines and anilines have been used as test systems to demonstrate the feasibility of this direct-linking and a no. of pharmaceuticals have been similarly coupled. The half-lives for release indicate the potential of these macromols. for use as in vivo drug depots.

L4 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2001 ACS
AN 1994:86219 HCAPLUS
DN 120:86219
TI Carboxymethyl dextran **lactone**: A preactivated polymer for amine conjugations
AU **Heindel, Ned D.**; Kauffman, Michael A.; Akyea, Eric K.; Engel, Stephanie A.; Frey, Michael F.; Lacey, C. Jeffrey; Egolf, Roger A.
CS Inst. Health Sci., Lehigh Univ., Bethlehem, PA, 18015, USA
SO Bioconjugate Chem. (1994), 5(1), 98-100 CODEN: BCCHES; ISSN: 1043-1802
DT Journal
LA English
CC 63-5 (Pharmaceuticals)
Section cross-reference(s): 33
AB The linking of amino haptens to carboxymethyl dextran (CMD) requires carboxyl activation, for example, via carbodiimides. The authors have discovered that substantial N-acylurea, derived from these carbodiimides, can be trapped on the CMD backbone. As an alternative, CMD can be conveniently **lactonized** by heating in inert solvents, and this carboxymethyl dextran **lactone** (CDL) can be employed directly for amine conjugation.
ST carboxymethyl dextran **lactone** amine conjugate prepn; drug targeting carboxymethyl dextran **lactone**
IT Amines, preparation
RL: SPN (Synthetic preparation); PREP (Preparation)
(carboxamidoalkyl, dextrans-contg., prepn. of as drug carriers)
IT Pharmaceutical dosage forms
(carriers, carboxymethyl dextran **lactone** as preactivated polymer for amine conjugation in)

IT 9044-05-7DP, Carboxymethyldextran, methoxybenzylamine derivs.
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and amine conjugation of, as drug carrier)
IT 152287-12-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
IT 152287-12-2DP, methoxybenzylamine derivs.
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as drug carrier)
IT 2393-23-9DP, 4-Methoxybenzylamine, reaction products with carboxymethyl dextrans
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as drug carriers)

L4 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2001 ACS
AN 1982:19896 HCAPLUS
DN 96:19896
TI Improved synthesis of 3-aralkylidene-5-arylthiophen-2-(3H)ones
AU Miller, Gerald A.; **Heindel, Ned D.**; Minatelli, John A.
CS Dep. Chem., Lehigh Univ., Bethlehem, PA, 18015, USA
SO J. Heterocycl. Chem. (1981), 18(6), 1253-4
CODEN: JHTCAD; ISSN: 0022-152X
DT Journal
LA English
CC 27-8 (Heterocyclic Compounds (One Hetero Atom))
GI

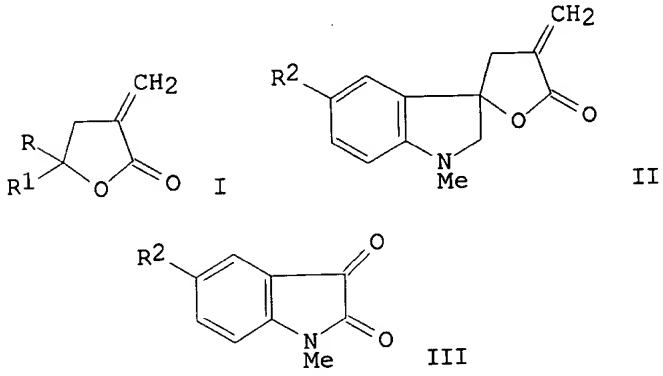



AB 3-Aralkylidene-5-arylthiophen-2(3H)-ones (I; R, R1 = aryl) were prepd. in 2 steps from 4-aryl-4-oxobutanoic acids via the intermediacy of butenolides II and thiophenones generated by the sequential action of Ac2O, NaSH and R1CHO.
ST **lactonization** aryloxobutanoic acid; arylbutenolide thiolation condensation benzaldehyde; aralkylidenearylthiophenone; thiophenone aryl aralkylidene
IT **Lactonization**
(of aryloxobutanoic acids, arylbutenolides from)
IT Condensation reaction
(thiolation and, of arylbutenolides with benzaldehyde derivs., arylkylidenethiophenones from)
IT Substitution reaction
(thiolation, of arylbutenolides, thiophenones from)
IT 104-88-1, reactions 874-42-0
RL: RCT (Reactant)
(condensation of, with arylthiophenone deriv.)
IT 2051-95-8 51036-98-7
RL: RCT (Reactant)
(**lactonization** of)
IT 80224-53-9P 80241-36-7P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

IT 1955-39-1P 80241-35-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn., thiolation and condensation of, with arom. aldehydes)

L4 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2001 ACS
AN 1981:192037 HCAPLUS
DN 94:192037
TI Synthesis and antibacterial and anticancer evaluations of .alpha.-methylene-.gamma.-butyrolactones
AU **Heindel, Ned D.**; Minatelli, John A.
CS Cent. Health Sci., Lehigh Univ., Bethlehem, PA, 18015, USA
SO J. Pharm. Sci. (1981), 70(1), 84-6
CODEN: JPMSAE; ISSN: 0022-3549
DT Journal
LA English
CC 27-10 (Heterocyclic Compounds (One Hetero Atom))
Section cross-reference(s): 1
GI




AB Butyrolactones I [R = Me, Ph, H; R1 = C6H4(CH2)3CO2Et-p, 2-thienyl, CH2Ph, p-(morpholinosulfonyl)phenyl, etc.] and II (R2 = H, I) were prepd. by Reformatskii condensation of BrCH2C(:CH2)CO2Et with RR1CO or the indolediones III. I [R = H, R1 = p-(morpholinosulfonyl)phenyl] and II (R2 = I) (IV) had anti-P-388 lymphocytic leukemia activity whereas IV inhibited human carcinoma of the nasopharynx. I and II were also screened for their antibacterial and antifungal activities.

ST butyrolactone anticancer; Reformatskii bromomethylacrylate ketone; antibacterial butyrolactone; fungicide butyrolactone

IT Bactericides, Disinfectants and Antiseptics
Fungicides and Fungistats
Neoplasm inhibitors
(methylenebutyrolactones as, prepn. of)

IT Reformatskii reaction
(of (bromomethyl)acrylate with ketones)

IT **Lactones**
RL: SPN (Synthetic preparation); PREP (Preparation)

(.gamma.-, .alpha.-methylene, prepn. of, by Reformatskii reaction of (bromomethyl)acrylate with ketones, antibacterial and anticancer activities of)

IT 122-78-1 135-00-2 2058-74-4 58722-33-1 71665-59-3 76034-84-9 77547-10-5 77547-11-6 77547-12-7
RL: RCT (Reactant)
(Reformatskii reaction of, with (bromomethyl)acrylate)

IT 17435-72-2
RL: RCT (Reactant)
(Reformatskii reaction of, with ketones)

IT 71741-89-4P 77547-02-5P 77547-03-6P 77547-04-7P 77547-05-8P 77547-06-9P 77547-07-0P 77547-08-1P 77547-09-2P
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. and anticancer activity of)

L4 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2001 ACS
AN 1972:94616 HCAPLUS
DN 76:94616
TI Synthesis, transformation, and general pharmacologic activity in 1,4-benzodiazepine-3,5-diones
AU **Heindel, Ned D.**; Fives, William P.; Lemke, Thomas F.; Rowe, Jay E.; Snady, Harry W.; Carrano, Richard A.
CS Dep. Chem., Lehigh Univ., Bethlehem, Pa., USA
SO J. Med. Chem. (1971), 14(12), 1233-5
CODEN: JMCMAR
DT Journal
LA English
CC 1 (Pharmacodynamics)
Section cross-reference(s): 28
AB 7-Halo-, methyl-, or methoxy-substituted 1,4-benzodiazepine-3,5-diones (I) showed only slight general pharmacol. activity when administered i.p. in doses .leq.1000 mg/kg, possibly due to poor absorption. 7-Fluoro-2-methoxycarbonylmethylene-2H-1,4-benzodiazepine-3,5(1H,4H)-dione [34297-51-3] (R = F) showed significant cardiovascular activity when given i.v. to rats. The compds. had low toxicity, as did the intermediates di-Me (2-carboxamidoanilino)fumarates from which I were obtained by cyclization. Hydride redn. of I yielded the 3-hydroxy analogs which were **lactonized** by treatment with alc. alkoxide.
ST benzodiazepinedione cardiovascular activity; diazepinedione benzo pharmacol
IT Circulation
(benzodiazepinediones effect on)

IT 13214-23-8 17244-25-6 17244-26-7 34297-51-3 35514-31-9 35514-33-1 35514-34-2
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmacol. of)

IT 13187-66-1P 13187-67-2P 13214-22-7P 17244-27-8P 35514-23-9P 35514-24-0P 35514-25-1P 35514-26-2P 35514-28-4P 35573-75-2P 35573-77-4P 35721-11-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

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     FILE 'WPIX, HCAPLUS' ENTERED AT 14:43:34 ON 03 OCT 2001
L1          192 S (LONGTON W? OR MARTEY C? OR HEINDEL N?)/AU
L2            1 S (LONGTON W? AND MARTEY C? AND HEINDEL N?)/AU
L3            6 S L1 AND LACTON?
L4            5 S L3 NOT L2
                SEL RN L3 1-6

     FILE 'REGISTRY' ENTERED AT 14:49:53 ON 03 OCT 2001
L5           49 S E1-E49

     FILE 'STNGUIDE' ENTERED AT 14:52:34 ON 03 OCT 2001

     FILE 'HCAPLUS' ENTERED AT 14:54:35 ON 03 OCT 2001
L6         3182 S ?LACTON?(L)(?STARCH? OR ?CHITOSAN? OR ?DEXTRAN? OR ?CELLULOS?
L7           89 S L6 AND ?CARBOXYMETHYL?
L8           28 S L7 AND PREP/RL
L9          288 S (?LACTON? AND ?CARBOXYMETHYL?)/TI,AB
L10          23 S (LACTON? AND CARBOXYMETHYL?)/TI
L11         258 S (LACTON? AND CARBOXYMETHYL?)/AB
L12         272 S L10 OR L11
L13         288 S (LACTON? AND CARBOXYMETHYL?)/AB,TI
L14          16 S L13 NOT L12
L15          11 S L12 AND L8
                SEL RN 1-11

     FILE 'REGISTRY' ENTERED AT 15:05:02 ON 03 OCT 2001
L16         222 S E50-E271
L17           1 S DIGLYME/CN

     FILE 'REGISTRY' ENTERED AT 15:05:55 ON 03 OCT 2001

     FILE 'HCAPLUS' ENTERED AT 15:06:03 ON 03 OCT 2001
L18          11 S L16 AND L15
L19           0 S L17 AND L12
L20           0 S L6 AND L17
L21          79 S L6 AND (XYLENE OR TOLUENE OR ACETONITRILE OR DIGLYME)
L22          78 S L21 NOT L18
                E LACTONIZ/CT
                E E4+ALL
                E E9+ALL
                E LACTON/CT
                E LACTONIZ/CT
L23        1374 S E4-E10
                E LACTONIS/CT
L24           0 S L23 AND L22
L25           4 S L23 AND L13
L26           3 S L25 NOT L18
L27       13858 S LACTON?(L)REACT?
                SET ABB ON PERM
L28       13858 S LACTON?(L)REACT?
L29          17 S L28 AND L22
L30          61 S L22 NOT L29

     FILE 'CASREACT' ENTERED AT 15:43:40 ON 03 OCT 2001
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Inventor Name Search

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L31             QUE LACTONE/FG.FORM (L) ALCOHOLS/FG.RXN (L) CARBOXYLIC/FG.RXN
L32         1992 S L31
L33              STR
L34              STR L33
L35            2 S L34 SSS  SUB=L32 SAM
L36           35 S L34 SSS  SUB=L32 FULL
                 SAVE L36 LACTONIZA/A

     FILE 'HCAPLUS' ENTERED AT 15:59:37 ON 03 OCT 2001
L37           15 S POLYSACCHARID?(L)LACTONIZ?
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=> d que l36
L32         1992 SEA FILE=CASREACT ABB=ON  PLU=ON  LACTONE/FG.FORM (L) ALCOHOLS/
                 FG.RXN (L) CARBOXYLIC/FG.RXN
L34                STR
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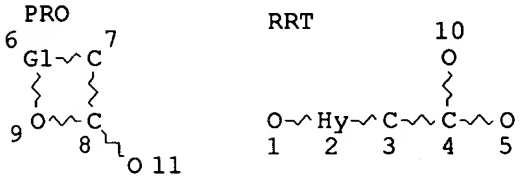


This structure Reaction Search was performed in CASREACT but the results were not relevant.

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REP G1=(2-3) C
NODE ATTRIBUTES:
CONNECT IS E1  RC AT   1
CONNECT IS E1  RC AT   5
CONNECT IS E1  RC AT  10
CONNECT IS E1  RC AT  11
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  11

STEREO ATTRIBUTES: NONE
L36           35 SEA FILE=CASREACT SUB=L32 SSS FUL L34 (    77 REACTIONS)
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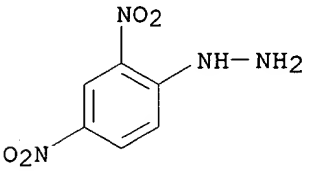
L37 ANSWER 1 OF 15 HCAPLUS COPYRIGHT 2001 ACS
AN 1994:701181 HCAPLUS
DN 121:301181
TI Novel Polysaccharide Surfactants: Synthesis of Model Compounds and Dextran-Based Surfactants
AU Zhang, Tianhong; Marchant, Roger E.
CS Department of Macromolecular Science, Case Western Reserve University, Cleveland, OH, 44106, USA
SO Macromolecules (1994), 27(25), 7302-8
CODEN: MAMOBX; ISSN: 0024-9297
DT Journal
LA English
AB Two novel dextran surfactants, N-n-hexyldextran aldonamide (diblock AB type) and N,N'-hexamethylenebis(dextran aldonamide) (triblock ABA type), which were composed of hydrophilic dextran oligosaccharide (Mw = 1600) and hydrophobic hexamethylene, were synthesized and characterized by GPC, FTIR, and 1H NMR. The dextran surfactants were prepd. by the selective oxidn. and **lactonization** of the reducing end groups of dextran oligosaccharide, followed by the aminolysis with hexylamine or 1,6-hexanediamine. The intermediate lactones reacted selectively with amines to form the amide linkages, obviating the need for protecting the hydroxyl groups in the dextran. To optimize the reaction conditions and purifn. methods, model compds. were synthesized from D-maltose monohydrate. An ion-exchange chromatog. method was developed to purify the dextran surfactants, based on the fact that the dextran surfactants are nonionic while the impurities are ionic. In addn. to linear diblock and triblock **polysaccharide** surfactants with different block chain lengths, the synthetic approach described in this report also provides a practicable route for the prepn. of synthetic approach described in this report also provides a practicable route for the prepn. of starlike and comblike **polysaccharide** surfactants.

L37 ANSWER 10 OF 15 HCAPLUS COPYRIGHT 2001 ACS
AN 1965:463445 HCAPLUS
DN 63:63445
OREF 63:11681d-g
TI .alpha.-D(1 .fwdarw. 4)-**Polysaccharides** of D-glucuronic acid and D-glucose. VIII. **Lactonization** of the .alpha.-D-(1 .fwdarw. 4)-linked disaccharides containing D-glucuronic acid residues
AU Hirasaka, Yoshinobu; Matsunaga, Isao
CS Chugai Pharm. Co., Tokyo
SO Chem. Pharm. Bull. (Tokyo) (1965), 13(6), 672-6
DT Journal
LA English
AB cf. CA 62, 14779a. When aq. solns. of I, II, and III were stirred at room temp. with a cation exchange resin, IV and V were formed. IV and V were converted to II and III by neutralization. IV and V had higher Rf values than II and III and were sepd. from them by chromatography on cellulose columns (eluted with EtOAcAcOH-water 3:1:1, 5 g. cellulose used per 500 mg. sugar). II-acetate (VI) and III-acetate (VII) were treated in CHCl3 with SnCl4 (Fry, CA 50, 4792e) to give the lactones VIII (50% yield, m. 80-5.degree. [.alpha.]25D 48.3 (c = 5.46, CHCl3) .nu.max. 1814, 1750 cm.-1) and IX (purified by chromatography on silica with tolucneacetone-alc. 3:1:1) which were identical with IV-acetate and V-acetate, resp. IV and V were treated with Me iodide and Ag2O to give methyl derivs. which were hydrolyzed with acid to give 2,3-di-O-methyl-D-glucuronic acid (X) and 2,3,4,6-tetra-O-methyl-D-glucose from IV and X and 2,3,4-tetra-O-methyl-D-glucuronic acid from V, confirming the position of the lactone ring.

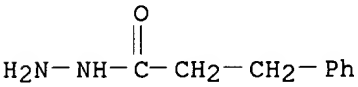
L18 ANSWER 1 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1999:761856 HCAPLUS
DN 132:124411
TI Synthesis of substituted hydrazides of **carboxymethyl** dextran
AU Il'ina, T. Yu.; Ponomarenko, M. N.; Iozep, A. A.
CS S.-Peterb. Gos. Khim.-Farm. Akad., St. Petersburg, Russia
SO Zh. Prikl. Khim. (S.-Peterburg) (1999), 72(6), 985-990
CODEN: ZPKHAB; ISSN: 0044-4618
PB Nauka
DT Journal
LA Russian
AB Activity of **carboxymethyl dextran** its Et ester, **lactone**, and azide is studied in its reactions with alkyl-, aryl-, and acylhydrazines.
IT **60-34-4**, Methylhydrazine **119-26-6**, 2,4-Dinitrophenylhydrazine **3538-68-9**, 3-Phenylpropanoylhydrazine
RL: RCT (Reactant)
(**carboxymethyl** dextran Et ester acylation of)
RN 60-34-4 HCAPLUS
CN Hydrazine, methyl- (6CI, 8CI, 9CI) (CA INDEX NAME)

$H_3C-NH-NH_2$

RN 119-26-6 HCAPLUS
CN Hydrazine, (2,4-dinitrophenyl)- (6CI, 8CI, 9CI) (CA INDEX NAME)



RN 3538-68-9 HCAPLUS
CN Benzenepropanoic acid, hydrazide (9CI) (CA INDEX NAME)

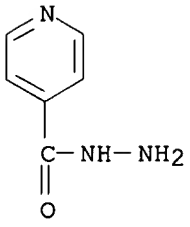


IT **100-46-9**, Benzylamine, reactions
RL: RCT (Reactant)
(reactivity of **carboxymethyl** dextran Et ester in reaction with)
RN 100-46-9 HCAPLUS
CN Benzenemethanamine (9CI) (CA INDEX NAME)

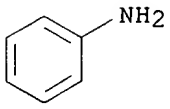
$H_2N-CH_2-Ph$

IT **54-85-3**, Isonicotinoylhydrazine **62-53-3**, Benzenamine, reactions **100-63-0**, Phenylhydrazine **103-67-3** **456-06-4**, p-FluoroBenzoylhydrazide **553-53-7**, Nicotinoylhydrazine **613-94-5**, Benzoylhydrazine **636-97-5** , p-NitroBenzoylhydrazide **936-02-7**, Salicylhydrazide **1452-63-7**, Picolinoylhydrazine **3290-99-1**, Anisic acid hydrazide **3619-22-5**, 4-Methylbenzoylhydrazine **5818-06-4** , m-Hydroxybenzoylhydrazide **9044-05-7**, **Carboxymethyl** dextran **26409-12-1 39115-96-3**, 3-Bromobenzoylhydrazine **53125-24-9**, **Carboxymethyldextran** azide **154452-55-8**, **Carboxymethyl** dextran ethyl ester **256374-92-2**
RL: RCT (Reactant)
(synthesis of substituted hydrazides of **carboxymethyl** dextran)

RN 54-85-3 HCAPLUS
CN 4-Pyridinecarboxylic acid, hydrazide (9CI) (CA INDEX NAME)



RN 62-53-3 HCAPLUS
CN Benzenamine (9CI) (CA INDEX NAME)



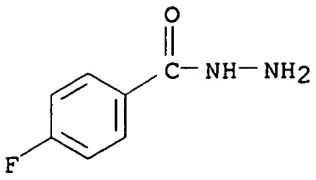
RN 100-63-0 HCAPLUS
CN Hydrazine, phenyl- (8CI, 9CI) (CA INDEX NAME)

$H_2N-NH-Ph$

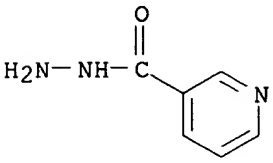
RN 103-67-3 HCAPLUS
CN Benzenemethanamine, N-methyl- (9CI) (CA INDEX NAME)

$MeNH-CH_2-Ph$

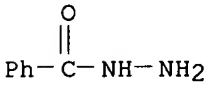
RN 456-06-4 HCAPLUS
CN Benzoic acid, 4-fluoro-, hydrazide (9CI) (CA INDEX NAME)



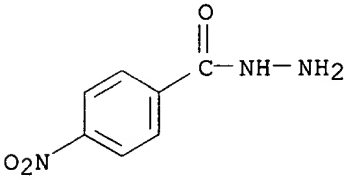
RN 553-53-7 HCAPLUS
CN 3-Pyridinecarboxylic acid, hydrazide (9CI) (CA INDEX NAME)



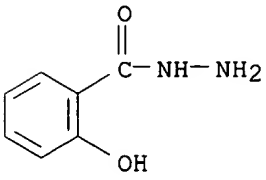
RN 613-94-5 HCAPLUS
CN Benzoic acid, hydrazide (6CI, 8CI, 9CI) (CA INDEX NAME)



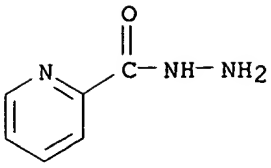
RN 636-97-5 HCAPLUS
CN Benzoic acid, 4-nitro-, hydrazide (9CI) (CA INDEX NAME)



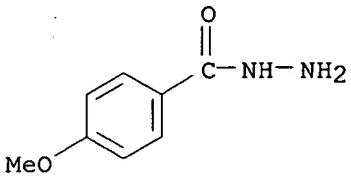
RN 936-02-7 HCAPLUS
CN Benzoic acid, 2-hydroxy-, hydrazide (9CI) (CA INDEX NAME)



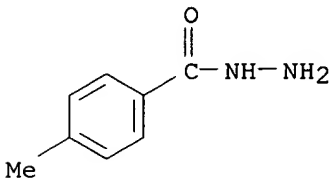
RN 1452-63-7 HCAPLUS
CN 2-Pyridinecarboxylic acid, hydrazide (9CI) (CA INDEX NAME)



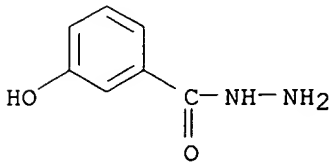
RN 3290-99-1 HCAPLUS
CN Benzoic acid, 4-methoxy-, hydrazide (9CI) (CA INDEX NAME)



RN 3619-22-5 HCAPLUS
CN Benzoic acid, 4-methyl-, hydrazide (9CI) (CA INDEX NAME)



RN 5818-06-4 HCAPLUS
CN Benzoic acid, 3-hydroxy-, hydrazide (9CI) (CA INDEX NAME)



RN 9044-05-7 HCAPLUS
CN Dextran, carboxymethyl ether (9CI) (CA INDEX NAME)

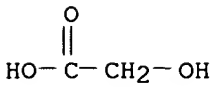
CM 1

CRN 9004-54-0
CMF Unspecified
CCI PMS, MAN

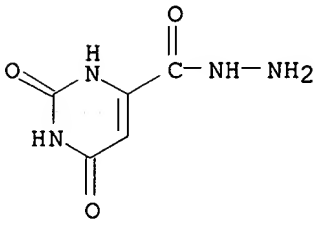
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

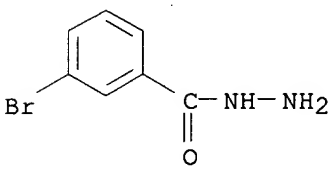
CRN 79-14-1
CMF C2 H4 O3



RN 26409-12-1 HCAPLUS
CN 4-Pyrimidinecarboxylic acid, 1,2,3,6-tetrahydro-2,6-dioxo-, hydrazide (9CI) (CA INDEX NAME)



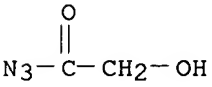
RN 39115-96-3 HCAPLUS
CN Benzoic acid, 3-bromo-, hydrazide (9CI) (CA INDEX NAME)



RN 53125-24-9 HCAPLUS
CN Dextran, 2-azido-2-oxoethyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 167613-56-1
CMF C2 H3 N3 O2



CM 2

CRN 9004-54-0
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 154452-55-8 HCAPLUS
CN Dextran, 2-ethoxy-2-oxoethyl ether (9CI) (CA INDEX NAME)

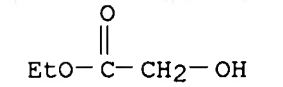
CM 1

CRN 9004-54-0
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

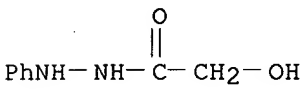
CRN 623-50-7
CMF C4 H8 O3



RN 256374-92-2 HCAPLUS
CN Dextran, 2-ethoxy-2-oxoethyl 2-oxo-2-(2-phenylhydrazino)ethyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 73514-26-8
CMF C8 H10 N2 O2



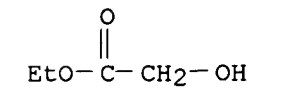
CM 2

CRN 9004-54-0
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 623-50-7
CMF C4 H8 O3

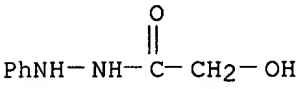


IT **256374-77-3P 256374-79-5P 256374-81-9P**
**256374-83-1P 256374-85-3P 256374-87-5P**
**256374-89-7P 256374-91-1P 256374-94-4P**
**256374-96-6P 256374-98-8P 256375-00-5P**
**256375-02-7P 256375-03-8P 256375-04-9P**
**256375-06-1P 256375-07-2P 256375-08-3P**
**256375-09-4P 256375-10-7P**
RL: SPN (Synthetic preparation); **PREP (Preparation)**
(synthesis of substituted hydrazides of **carboxymethyl** dextran)

RN 256374-77-3 HCAPLUS
CN Dextran, carboxymethyl 2-oxo-2-(2-phenylhydrazino)ethyl ether, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 73514-26-8
CMF C8 H10 N2 O2



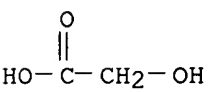
CM 2

CRN 9004-54-0
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

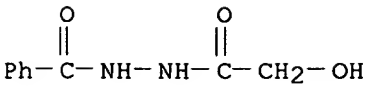
CRN 79-14-1
CMF C2 H4 O3



RN 256374-79-5 HCAPLUS
CN Dextran, 2-(2-benzoylhydrazino)-2-oxoethyl carboxymethyl ether, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 256374-78-4
CMF C9 H10 N2 O3



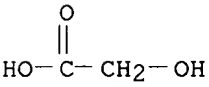
CM 2

CRN 9004-54-0
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

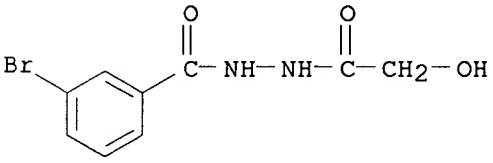
CRN 79-14-1
CMF C2 H4 O3



RN 256374-81-9 HCAPLUS
CN Dextran, 2-[2-(3-bromobenzoyl)hydrazino]-2-oxoethyl carboxymethyl ether, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 256374-80-8
CMF C9 H9 Br N2 O3



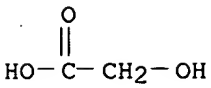
CM 2

CRN 9004-54-0
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

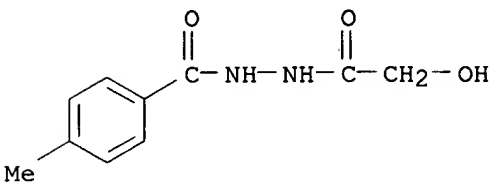
CRN 79-14-1
CMF C2 H4 O3



RN 256374-83-1 HCAPLUS
CN Dextran, carboxymethyl 2-[2-(4-methylbenzoyl)hydrazino]-2-oxoethyl ether, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 256374-82-0
CMF C10 H12 N2 O3



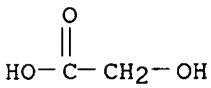
CM 2

CRN 9004-54-0
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

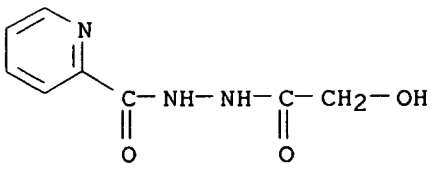
CRN 79-14-1
CMF C2 H4 O3



RN 256374-85-3 HCAPLUS
CN Dextran, carboxymethyl 2-oxo-2-[2-(2-pyridinylcarbonyl)hydrazino]ethyl ether, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 256374-84-2
CMF C8 H9 N3 O3



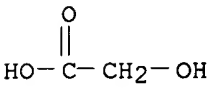
CM 2

CRN 9004-54-0
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

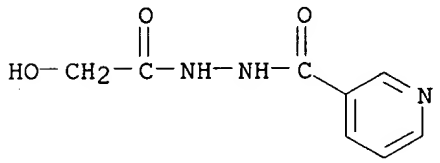
CRN 79-14-1
CMF C2 H4 O3



RN 256374-87-5 HCAPLUS
CN Dextran, carboxymethyl 2-oxo-2-[2-(3-pyridinylcarbonyl)hydrazino]ethyl ether, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 256374-86-4
CMF C8 H9 N3 O3



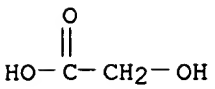
CM 2

CRN 9004-54-0
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

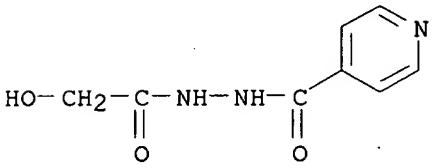
CRN 79-14-1
CMF C2 H4 O3



RN 256374-89-7 HCAPLUS
CN Dextran, carboxymethyl 2-oxo-2-[2-(4-pyridinylcarbonyl)hydrazino]ethyl ether, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 256374-88-6
CMF C8 H9 N3 O3



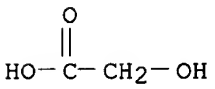
CM 2

CRN 9004-54-0
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

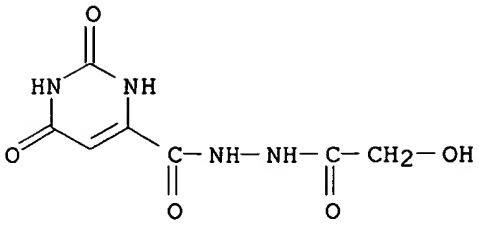
CRN 79-14-1
CMF C2 H4 O3



RN 256374-91-1 HCAPLUS
CN Dextran, carboxymethyl 2-oxo-2-[2-[(1,2,3,6-tetrahydro-2,6-dioxo-4-pyrimidinyl)carbonyl]hydrazino]ethyl ether, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 256374-90-0
CMF C7 H8 N4 O5



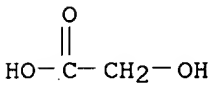
CM 2

CRN 9004-54-0
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

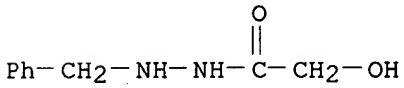
CRN 79-14-1
CMF C2 H4 O3



RN 256374-94-4 HCAPLUS
CN Dextran, 2-ethoxy-2-oxoethyl 2-oxo-2-[2-(phenylmethyl)hydrazino]ethyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 256374-93-3
CMF C9 H12 N2 O2



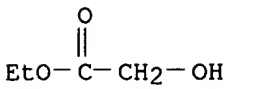
CM 2

CRN 9004-54-0
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

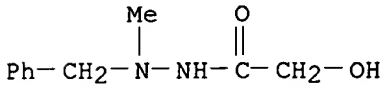
CRN 623-50-7
CMF C4 H8 O3



RN 256374-96-6 HCAPLUS
CN Dextran, 2-ethoxy-2-oxoethyl 2-[2-methyl-2-(phenylmethyl)hydrazino]-2-oxoethyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 256374-95-5
CMF C10 H14 N2 O2



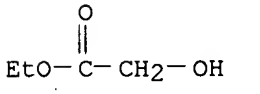
CM 2

CRN 9004-54-0
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

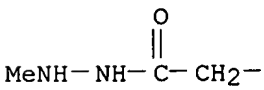
CRN 623-50-7
CMF C4 H8 O3

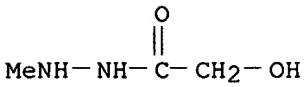


RN 256374-98-8 HCAPLUS
CN Dextran, 2-ethoxy-2-oxoethyl 2-(2-methylhydrazino)-2-oxoethyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 256374-97-7
CMF C3 H8 N2 O2





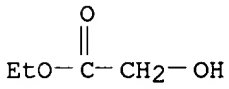
CM 2

CRN 9004-54-0
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

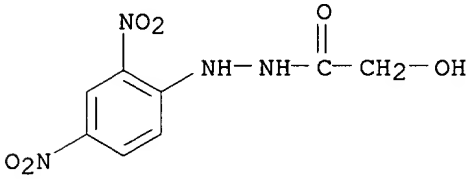
CRN 623-50-7
CMF C4 H8 O3



RN 256375-00-5 HCAPLUS
CN Dextran, 2-[2-(2,4-dinitrophenyl)hydrazino]-2-oxoethyl 2-ethoxy-2-oxoethyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 256374-99-9
CMF C8 H8 N4 O6



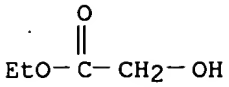
CM 2

CRN 9004-54-0
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

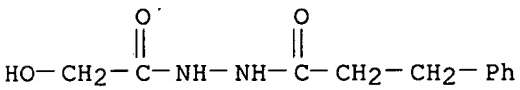
CRN 623-50-7
CMF C4 H8 O3



RN 256375-02-7 HCAPLUS
CN Dextran, 2-ethoxy-2-oxoethyl 2-oxo-2-[2-(1-oxo-3-phenylpropyl)hydrazino]ethyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 256375-01-6
CMF C11 H14 N2 O3



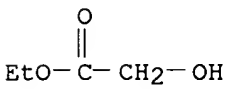
CM 2

CRN 9004-54-0
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

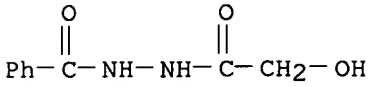
CRN 623-50-7
CMF C4 H8 O3



RN 256375-03-8 HCAPLUS
CN Dextran, 2-(2-benzoylhydrazino)-2-oxoethyl 2-ethoxy-2-oxoethyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 256374-78-4
CMF C9 H10 N2 O3



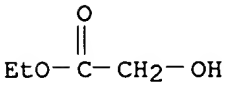
CM 2

CRN 9004-54-0
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

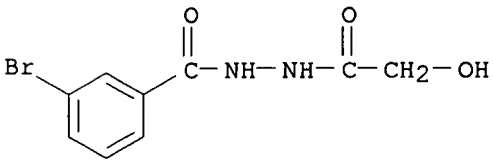
CRN 623-50-7
CMF C4 H8 O3



RN 256375-04-9 HCAPLUS
CN Dextran, 2-[2-(3-bromobenzoyl)hydrazino]-2-oxoethyl 2-ethoxy-2-oxoethyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 256374-80-8
CMF C9 H9 Br N2 O3



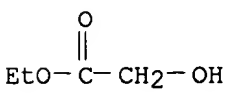
CM 2

CRN 9004-54-0
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

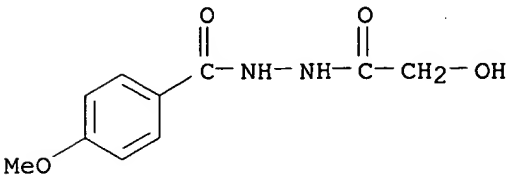
CRN 623-50-7
CMF C4 H8 O3



RN 256375-06-1 HCAPLUS
CN Dextran, 2-ethoxy-2-oxoethyl 2-[2-(4-methoxybenzoyl)hydrazino]-2-oxoethyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 256375-05-0
CMF C10 H12 N2 O4



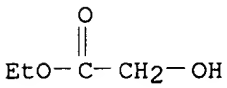
CM 2

CRN 9004-54-0
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

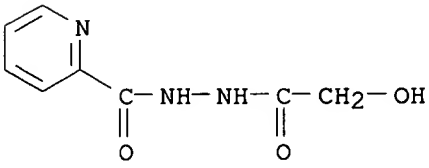
CRN 623-50-7
CMF C4 H8 O3



RN 256375-07-2 HCAPLUS
CN Dextran, 2-ethoxy-2-oxoethyl 2-oxo-2-[2-(2-pyridinylcarbonyl)hydrazino]ethyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 256374-84-2
CMF C8 H9 N3 O3



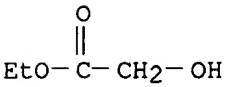
CM 2

CRN 9004-54-0
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

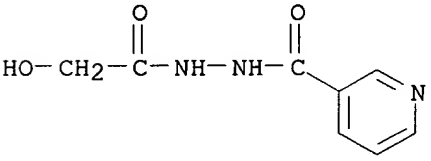
CRN 623-50-7
CMF C4 H8 O3



RN 256375-08-3 HCAPLUS
CN Dextran, 2-ethoxy-2-oxoethyl 2-oxo-2-[2-(3-pyridinylcarbonyl)hydrazino]eth
yl ether (9CI) (CA INDEX NAME)

CM 1

CRN 256374-86-4
CMF C8 H9 N3 O3



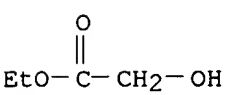
CM 2

CRN 9004-54-0
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

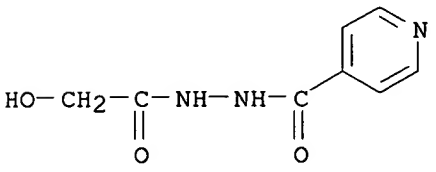
CRN 623-50-7
CMF C4 H8 O3



RN 256375-09-4 HCAPLUS
CN Dextran, 2-ethoxy-2-oxoethyl 2-oxo-2-[2-(4-pyridinylcarbonyl)hydrazino]eth
yl ether (9CI) (CA INDEX NAME)

CM 1

CRN 256374-88-6
CMF C8 H9 N3 O3



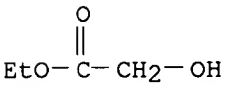
CM 2

CRN 9004-54-0
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

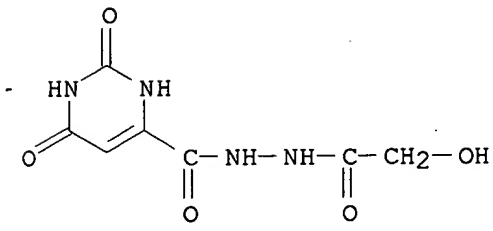
CRN 623-50-7
CMF C4 H8 O3



RN 256375-10-7 HCAPLUS
CN Dextran, 2-ethoxy-2-oxoethyl 2-oxo-2-[2-[(1,2,3,6-tetrahydro-2,6-dioxo-4-
pyrimidinyl)carbonyl]hydrazino]ethyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 256374-90-0
CMF C7 H8 N4 O5



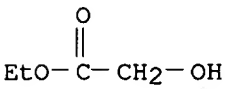
CM 2

CRN 9004-54-0
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 623-50-7
CMF C4 H8 O3

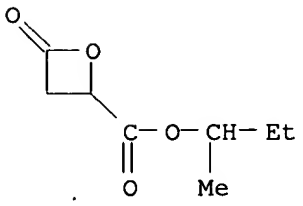


L18 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1999:622788 HCAPLUS
DN 131:356030
TI Functionalized and degradable polymers of malic acid stimulate bone repair
AU Jeanbat-Mimaud, Viviane; Barbaud, Christel; Caruelle, Jean-Pierre; Barritault, Denis; Cammas-Marion, Sandrine; Langlois, Valerie; Guerin, Philippe
CS Laboratoire de recherche sur la croissance cellulaire, la reparation et la regeneration tissulaire, Laboratoire de recherche sur la croissance cellulaire, la reparation et la regeneration tissulaire, UPRESA 7053 CNRS-universite Paris-XII, Creteil, 94010, Fr.
SO C. R. Acad. Sci., Ser. IIc: Chim. (1999), 2(7-8), 393-401
CODEN: CASCFN; ISSN: 1387-1609
PB Editions Scientifiques et Medicales Elsevier
DT Journal
LA English
AB A water sol. and hydrolyzable polyester derived from malic acid has been synthesized by copolymn. of three different **malolactonic** acid esters. Functional pendant groups have been selected to interact with and protect heparin binding growth factors (HBGF). Three .beta.-substituted .beta.-**lactones** have been synthesized by using aspartic acid as a chiral precursor and benzyl, allyl and Bu alcs. in the formation of the ester pendant groups. The terpolymer has been subjected to three consecutive different chem. modifications. This modified terpolymer, able to induce new bone formation in an in vivo model, has the same property as **carboxymethyl** benzylamide sulfonate **dextrans** (CMDBS). Consequently, the distribution of the lateral functional groups is more essential than the glucidic nature of the backbone to acquire biol. efficiency.
IT **250375-83-8DP**, epoxidized and sulfated
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); **PREP (Preparation)**; USES (Uses)
(functionalized and degradable polymers of malic acid stimulate bone repair)
RN 250375-83-8 HCAPLUS

CN 2-Oxetanecarboxylic acid, 4-oxo-, 1-methylpropyl ester, polymer with phenylmethyl 4-oxo-2-oxetanecarboxylate and 2-propenyl 4-oxo-2-oxetanecarboxylate (9CI) (CA INDEX NAME)

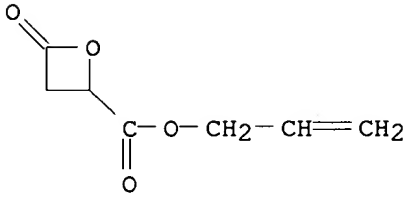
CM 1

CRN 250375-82-7
CMF C8 H12 O4



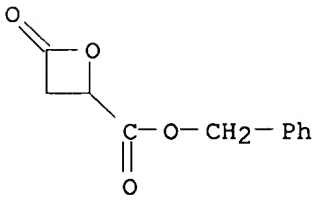
CM 2

CRN 182230-28-0
CMF C7 H8 O4



CM 3

CRN 76652-44-3
CMF C11 H10 O4

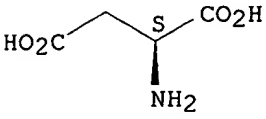


IT **56-84-8**, Aspartic acid, reactions **923-06-8**, Butanedioic acid, bromo-
RL: RCT (Reactant)
(functionalized and degradable polymers of malic acid stimulate bone repair)

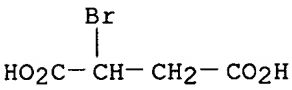
RN 56-84-8 HCAPLUS

CN L-Aspartic acid (9CI) (CA INDEX NAME)

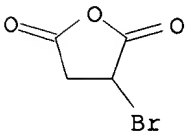
Absolute stereochemistry. Rotation (+).



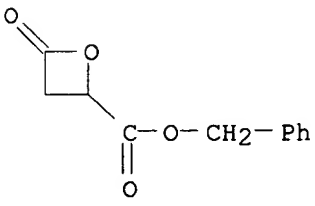
RN 923-06-8 HCAPLUS
CN Butanedioic acid, bromo- (9CI) (CA INDEX NAME)



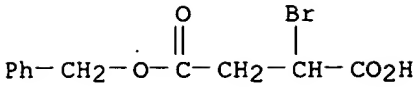
IT **5470-44-0P**, Bromosuccinic anhydride **76652-44-3P**, Benzyl malolactonate **88850-36-6P 182230-28-0P**, 2-Oxetanecarboxylic acid, 4-oxo-, 2-propenyl ester **197014-62-3P** **250375-82-7P 250375-83-8P 250375-87-2P** **250375-90-7P 250375-98-5P 250376-01-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); **PREP (Preparation)**
(functionalized and degradable polymers of malic acid stimulate bone repair)
RN 5470-44-0 HCAPLUS
CN 2,5-Furandione, 3-bromodihydro- (9CI) (CA INDEX NAME)



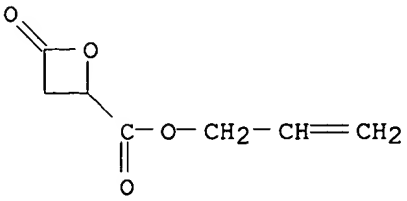
RN 76652-44-3 HCAPLUS
CN 2-Oxetanecarboxylic acid, 4-oxo-, phenylmethyl ester (9CI) (CA INDEX NAME)



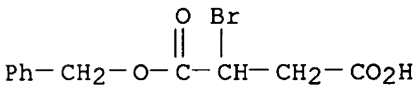
RN 88850-36-6 HCAPLUS
CN Butanedioic acid, bromo-, 4-(phenylmethyl) ester (9CI) (CA INDEX NAME)



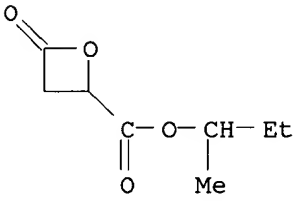
RN 182230-28-0 HCAPLUS
CN 2-Oxetanecarboxylic acid, 4-oxo-, 2-propenyl ester (9CI) (CA INDEX NAME)



RN 197014-62-3 HCAPLUS
CN Butanedioic acid, bromo-, 1-(phenylmethyl) ester (9CI) (CA INDEX NAME)



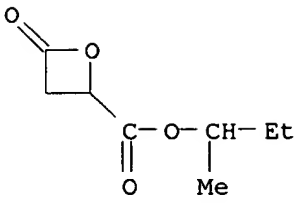
RN 250375-82-7 HCAPLUS
CN 2-Oxetanecarboxylic acid, 4-oxo-, 1-methylpropyl ester (9CI) (CA INDEX NAME)



RN 250375-83-8 HCAPLUS
CN 2-Oxetanecarboxylic acid, 4-oxo-, 1-methylpropyl ester, polymer with phenylmethyl 4-oxo-2-oxetanecarboxylate and 2-propenyl 4-oxo-2-oxetanecarboxylate (9CI) (CA INDEX NAME)

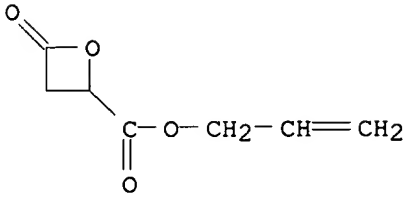
CM 1

CRN 250375-82-7
CMF C8 H12 O4



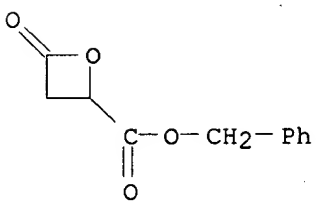
CM 2

CRN 182230-28-0
CMF C7 H8 O4

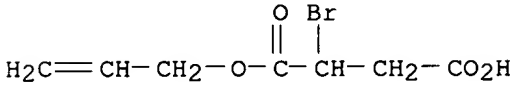


CM 3

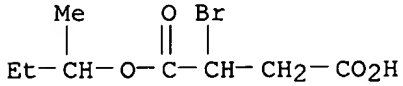
CRN 76652-44-3
CMF C11 H10 O4

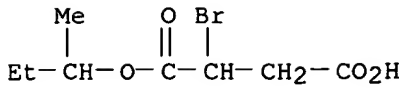


RN 250375-87-2 HCAPLUS
CN Butanedioic acid, bromo-, 1-(2-propenyl) ester (9CI) (CA INDEX NAME)

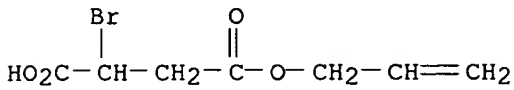


RN 250375-90-7 HCAPLUS
CN Butanedioic acid, bromo-, 1-(1-methylpropyl) ester (9CI) (CA INDEX NAME)

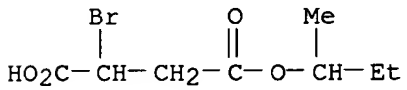




RN 250375-98-5 HCAPLUS
CN Butanedioic acid, bromo-, 4-(2-propenyl) ester (9CI) (CA INDEX NAME)



RN 250376-01-3 HCAPLUS
CN Butanedioic acid, bromo-, 4-(1-methylpropyl) ester (9CI) (CA INDEX NAME)

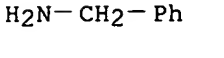


RE.CNT 26
RE
(1) Blanquaert, F; Bone 1995, V17(6), P499 HCAPLUS
(3) Boutault, K; Macromolecules 1995, V28, P3516 HCAPLUS
(4) Braud, C; ACS Polymers Preprints 1988, V29(1), P600 HCAPLUS
(5) Cammas, S; Biodegradable Plastics and Polymers 1994, P534 HCAPLUS
(6) Cammas, S; Polym Bull 1994, V33, P149 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1995:177613 HCAPLUS
DN 122:187929
TI Synthesis of substituted **carboxymethyldextran** amides
AU Iozep, A. A.; Il'ina, T. Yu.; Passet, B. V.
CS St. Peterburg. Khim.-Farm. Inst., St. Petersburg, Russia
SO Zh. Prikl. Khim. (S.-Peterburg) (1994), 67(3), 470-4
CODEN: ZPKHAB; ISSN: 0044-4618
DT Journal
LA Russian
AB Reaction of benzylamine with **carboxymethyldextran** esters and **lactones** leads to **carboxymethyldextran** amides. The conversion of the ester groups to amide groups can reach 100%.
IT **9004-54-0DP**, Dextran, **carboxymethylated**, amides, sodium salts
RL: SPN (Synthetic preparation); **PREP (Preparation)**
(prepn. of)
RN 9004-54-0 HCAPLUS
CN Dextran (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **100-46-9D**, Benzylamine, reaction products with **carboxymethyldextran** esters and **lactones**
**9004-54-0D**, Dextran, **carboxymethylated**, alkyl esters
RL: RCT (Reactant)

(prepn. of **carboxymethyldextran** amides)
RN 100-46-9 HCAPLUS
CN Benzenemethanamine (9CI) (CA INDEX NAME)



RN 9004-54-0 HCAPLUS
CN Dextran (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L18 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1995:177612 HCAPLUS
DN 122:161109
TI **Carboxymethyldextran lactones**
AU Iozep, A. A.; Il'ina, T. Yu.; Passet, B. V.
CS St. Peterburg. Khim.-Farm. Inst., St. Petersburg, Russia
SO Zh. Prikl. Khim. (S.-Peterburg) (1994), 67(3), 467-9
CODEN: ZPKHAB; ISSN: 0044-4618
DT Journal
LA Russian
AB **Carboxymethyldextran** can be **lactonized** by heating the dry powder or in an inert org. solvent under milder conditions. The degree of **lactonization** depends on the degree of **carboxymethylation**, the org. solvent, the temp., and the reaction time and amts. to 6-33%..
IT **9004-54-0DP, Dextran, carboxymethylated, lactones**
RL: SPN (Synthetic preparation); **PREP (Preparation)**
(prepn. of)
RN 9004-54-0 HCAPLUS
CN Dextran (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L18 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1994:86219 HCAPLUS
DN 120:86219
TI **Carboxymethyl dextran lactone**: A preactivated polymer for amine conjugations
AU Heindel, Ned D.; Kauffman, Michael A.; Akyea, Eric K.; Engel, Stephanie A.; Frey, Michael F.; Lacey, C. Jeffrey; Egolf, Roger A.
CS Inst. Health Sci., Lehigh Univ., Bethlehem, PA, 18015, USA
SO Bioconjugate Chem. (1994), 5(1), 98-100
CODEN: BCCHES; ISSN: 1043-1802
DT Journal
LA English
AB The linking of amino haptens to **carboxymethyl dextran** (CMD) requires carboxyl activation, for example, via carbodiimides. The authors have discovered that substantial N-acylurea, derived from these carbodiimides, can be trapped on the CMD backbone. As an alternative, CMD can be conveniently **lactonized** by heating in inert solvents, and this **carboxymethyl dextran lactone** (CDL) can be employed directly for amine conjugation.
IT **9044-05-7DP, Carboxymethyldextran**, methoxybenzylamine

derivs.
RL: SPN (Synthetic preparation); **PREP (Preparation)**
(prepn. and amine conjugation of, as drug carrier)
RN 9044-05-7 HCAPLUS
CN Dextran, carboxymethyl ether (9CI) (CA INDEX NAME)

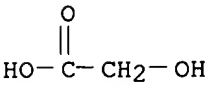
CM 1

CRN 9004-54-0
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

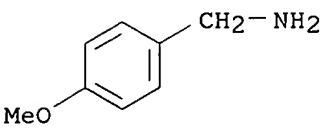
CRN 79-14-1
CMF C2 H4 O3



IT **152287-12-2P**
RL: SPN (Synthetic preparation); **PREP (Preparation)**
(prepn. of)
RN 152287-12-2 HCAPLUS
CN Dextran, 2-(carboxymethyl) ether, .delta.-lactone (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **152287-12-2DP**, methoxybenzylamine derivs.
RL: SPN (Synthetic preparation); **PREP (Preparation)**
(prepn. of, as drug carrier)
RN 152287-12-2 HCAPLUS
CN Dextran, 2-(carboxymethyl) ether, .delta.-lactone (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **2393-23-9DP**, 4-Methoxybenzylamine, reaction products with **carboxymethyl** dextrans
RL: SPN (Synthetic preparation); **PREP (Preparation)**
(prepn. of, as drug carriers)
RN 2393-23-9 HCAPLUS
CN Benzenemethanamine, 4-methoxy- (9CI) (CA INDEX NAME)



L18 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1988:167456 HCAPLUS
DN 108:167456

TI Preparation, testing, and formulation of 7-(4-isoxazolyl)- and 7-(4-isothiazolyl)-6-hexenoates and related lactones as anticholesteremics

IN Maier, Roland; Woitun, Eberhard; Mueller, Peter; Bomhard, Andreas; Eisele, Bernhard; Grube, Helmut

PA Thomae, Dr. Karl, G.m.b.H., Fed. Rep. Ger.

SO Ger. Offen., 17 pp.
CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| DE 3621372 | A1 | 19880107 | DE 1986-3621372 | 19860626 |

OS MARPAT 108:167456

AB The title compds. [I; A = CH(OH)CH2CH(OH)CH2CO2R3, hydroxypyranone moiety Q; R1 = C1-5 alkyl, (un)substituted Ph; R2 = C1-4 alkyl, alkenyl, heptadecyl, cyclohexyl, naphthyl, thienyl, furyl, (un)substituted Ph; R3 = H, physiol. acceptable cation, hydrolyzable alkyl, phenylalkyl; X = O, S] and their racemates and stereoisomers were prepd. as inhibitors of hydroxymethylgutaryl-CoA reductase (HMG-CoA reductase), useful for treatment of hyperlipemia and atherosclerosis. Na (E)-7-[5-(2,4-dimethoxyphenyl)-3-methyl-4-isoxazolyl]-3,5-dihydroxy-6-heptenoate (II) was prepd. in several steps from 5-(2,4-dimethoxyphenyl)-3-methylisoxazole via the protected intermediate I [A = CH(OR4)CH2CH(OR4) CH2CO2Me, R1 = Me, R2 = 2,4-(MeO)2C6H3, R4 = Me3CSiPh2] which was deprotected and **lactonized** by treatment with Bu4N+F- to give I [A = Q, R1 = Me, R2 = 2,4-(MeO)2C6H3]. The latter was cleaved with aq. NaOH to give II. In rat liver prepns. II gave >90% inhibition of HMG-Co A reductase at 10-5 M. Tablets were prepd. each contg. II 150.0, lactose 224.5, **cornstarch** 100.0, microcryst. **cellulose** 80.0, Na **carboxymethylcellulose** 4.0, and Mg stearate 1.5 mg.

IT **37250-24-1**, Hydroxymethylglutaryl-coenzyme A reductase
RL: USES (Uses)
(inhibitors, isoxazolylheptenoates)

RN 37250-24-1 HCAPLUS

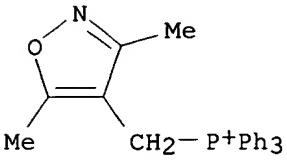
CN Reductase, hydroxymethylglutaryl coenzyme A (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT **28241-32-9P 52605-61-5P 113826-87-2P**
**113841-32-0P 113841-33-1P 113841-34-2P**
**113841-35-3P 113841-36-4P 113841-37-5P**
**113841-38-6P 113841-39-7P 113841-40-0P**
**113841-41-1P 113841-42-2P 113841-43-3P**
**113841-44-4P 113841-45-5P 113841-46-6P**
**113841-47-7P 113841-48-8P 113841-49-9P**
**113841-50-2P 113841-51-3P 113841-52-4P**
**113841-53-5P 113841-59-1P 113841-60-4P**
**113841-61-5P 113841-62-6P 113841-63-7P**
**113841-64-8P 113841-65-9P 113841-67-1P**
**113841-68-2P 113841-69-3P 113841-70-6P**
**113841-71-7P 113841-72-8P 113841-73-9P**
**113841-74-0P 113841-75-1P 113841-76-2P**
**113841-77-3P 113841-78-4P 113841-79-5P**
**113841-80-8P 113879-76-8P 113879-77-9P**
**113879-78-0P 113879-79-1P 113879-80-4P**
**113879-81-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); **PREP**

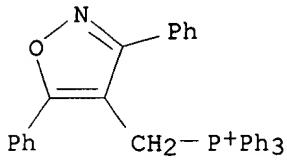
**(Preparation)**
(prepn. and reaction of, in prepn. of hypolipemic)

RN 28241-32-9 HCAPLUS
CN Phosphonium, [(3,5-dimethyl-4-isoxazolyl)methyl]triphenyl-, chloride (8CI, 9CI) (CA INDEX NAME)



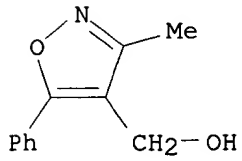
● $Cl^-$

RN 52605-61-5 HCAPLUS
CN Phosphonium, [(3,5-diphenyl-4-isoxazolyl)methyl]triphenyl-, bromide (9CI) (CA INDEX NAME)



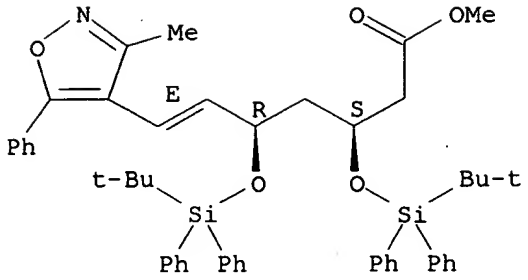
● $Br^-$

RN 113826-87-2 HCAPLUS
CN 4-Isoxazolemethanol, 3-methyl-5-phenyl- (9CI) (CA INDEX NAME)



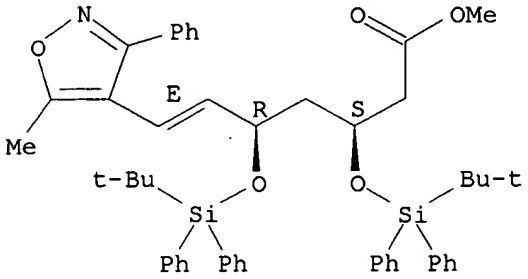
RN 113841-32-0 HCAPLUS
CN 6-Heptenoic acid, 3,5-bis[[(1,1-dimethylethyl)diphenylsilyl]oxy]-7-(3-methyl-5-phenyl-4-isoxazolyl)-, methyl ester, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



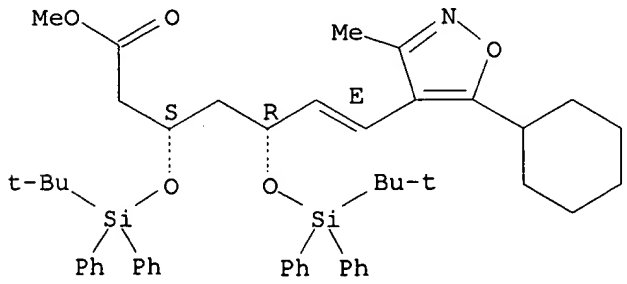
RN 113841-33-1 HCAPLUS
CN 6-Heptenoic acid, 3,5-bis[[(1,1-dimethylethyl)diphenylsilyl]oxy]-7-(5-methyl-3-phenyl-4-isoxazolyl)-, methyl ester, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



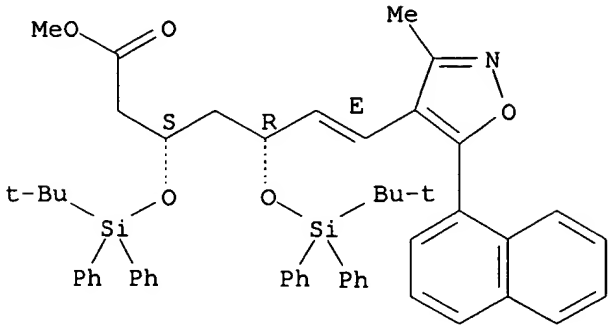
RN 113841-34-2 HCAPLUS
CN 6-Heptenoic acid, 7-(5-cyclohexyl-3-methyl-4-isoxazolyl)-3,5-bis[[(1,1-dimethylethyl)diphenylsilyl]oxy]-, methyl ester, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



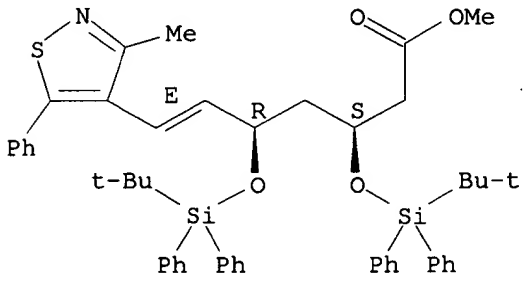
RN 113841-35-3 HCAPLUS
CN 6-Heptenoic acid, 3,5-bis[[(1,1-dimethylethyl)diphenylsilyl]oxy]-7-[3-methyl-5-(1-naphthalenyl)-4-isoxazolyl]-, methyl ester, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



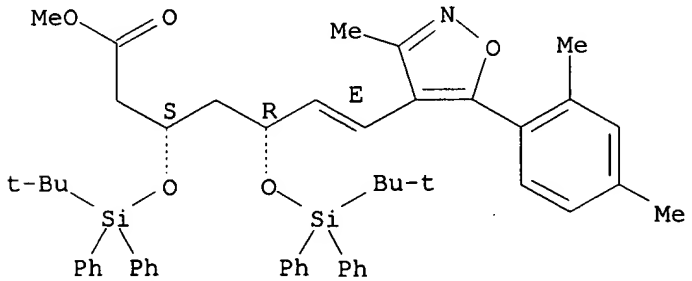
RN 113841-36-4 HCAPLUS
CN 6-Heptenoic acid, 3,5-bis[[(1,1-dimethylethyl)diphenylsilyl]oxy]-7-(3-methyl-5-phenyl-4-isothiazolyl)-, methyl ester, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



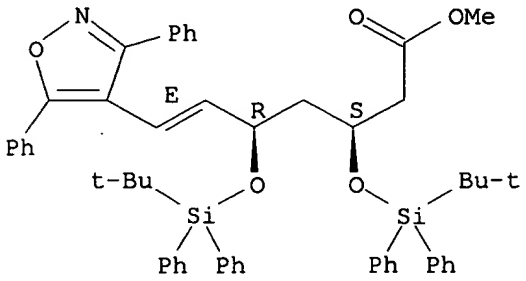
RN 113841-37-5 HCAPLUS
CN 6-Heptenoic acid, 3,5-bis[[(1,1-dimethylethyl)diphenylsilyl]oxy]-7-[5-(2,4-dimethylphenyl)-3-methyl-4-isoxazolyl]-, methyl ester, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



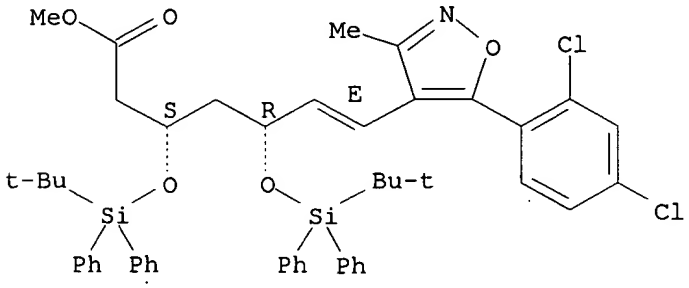
RN 113841-38-6 HCAPLUS
CN 6-Heptenoic acid, 3,5-bis[[(1,1-dimethylethyl)diphenylsilyl]oxy]-7-(3,5-diphenyl-4-isoxazolyl)-, methyl ester, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



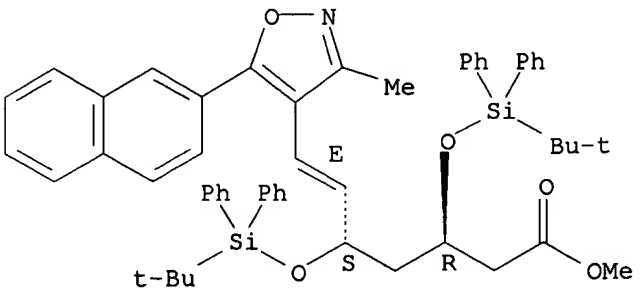
RN 113841-39-7 HCAPLUS
CN 6-Heptenoic acid, 7-[5-(2,4-dichlorophenyl)-3-methyl-4-isoxazolyl]-3,5-bis[[(1,1-dimethylethyl)diphenylsilyl]oxy]-, methyl ester, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

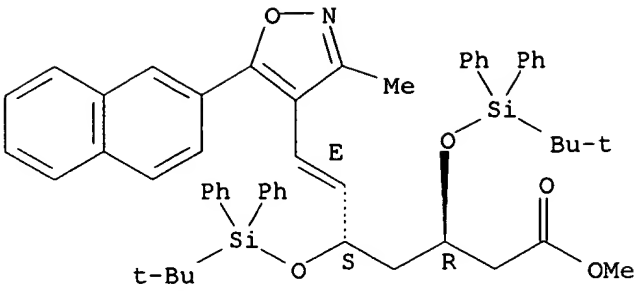
Relative stereochemistry.
Double bond geometry as shown.



RN 113841-40-0 HCAPLUS
CN 6-Heptenoic acid, 3,5-bis[[(1,1-dimethylethyl)diphenylsilyl]oxy]-7-[3-methyl-5-(2-naphthalenyl)-4-isoxazolyl]-, methyl ester, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

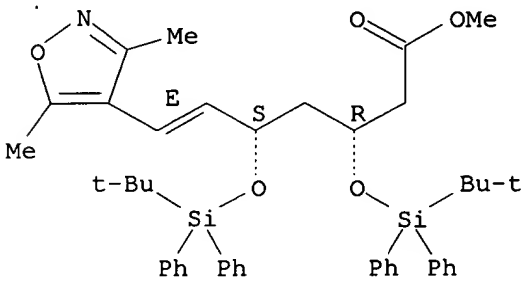
Relative stereochemistry.
Double bond geometry as shown.





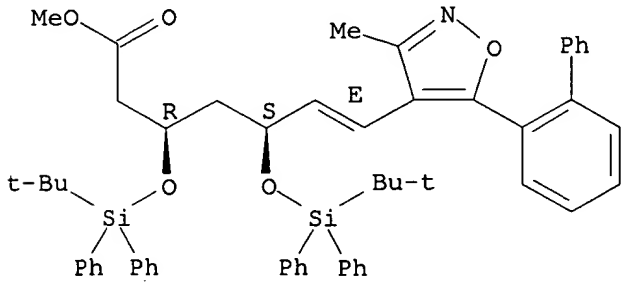
RN 113841-41-1 HCAPLUS
CN 6-Heptenoic acid, 3,5-bis[[(1,1-dimethylethyl)diphenylsilyl]oxy]-7-(3,5-dimethyl-4-isoxazolyl)-, methyl ester, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



RN 113841-42-2 HCAPLUS
CN 6-Heptenoic acid, 7-(5-[1,1'-biphenyl]-2-yl-3-methyl-4-isoxazolyl)-3,5-bis[[(1,1-dimethylethyl)diphenylsilyl]oxy]-, methyl ester, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

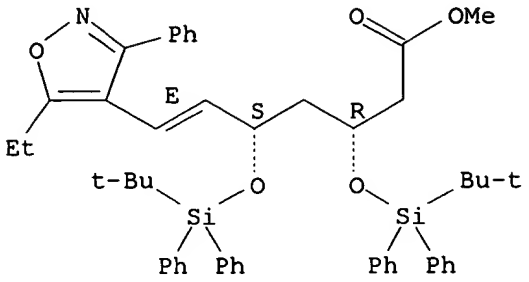
Relative stereochemistry.
Double bond geometry as shown.



RN 113841-43-3 HCAPLUS
CN 6-Heptenoic acid, 3,5-bis[[(1,1-dimethylethyl)diphenylsilyl]oxy]-7-(5-ethyl-3-phenyl-4-isoxazolyl)-, methyl ester, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

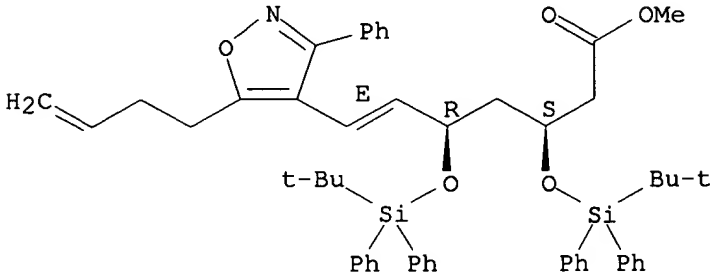
Relative stereochemistry.

Double bond geometry as shown.



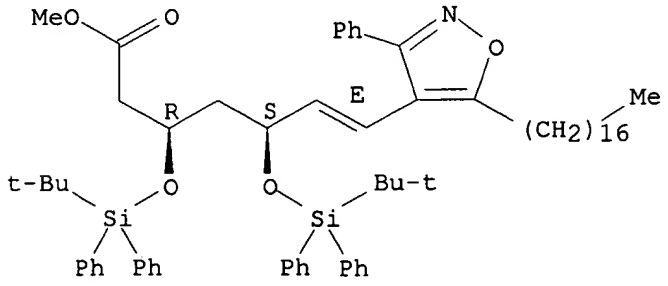
RN 113841-44-4 HCAPLUS
CN 6-Heptenoic acid, 7-[5-(3-butenyl)-3-phenyl-4-isoxazolyl]-3,5-bis[[(1,1-dimethylethyl)diphenylsilyl]oxy]-, methyl ester, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



RN 113841-45-5 HCAPLUS
CN 6-Heptenoic acid, 3,5-bis[[(1,1-dimethylethyl)diphenylsilyl]oxy]-7-(5-heptadecyl-3-phenyl-4-isoxazolyl)-, methyl ester, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

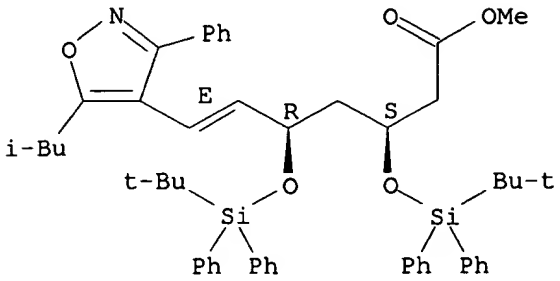
Relative stereochemistry.
Double bond geometry as shown.



RN 113841-46-6 HCAPLUS
CN 6-Heptenoic acid, 3,5-bis[[(1,1-dimethylethyl)diphenylsilyl]oxy]-7-[5-(2-methylpropyl)-3-phenyl-4-isoxazolyl]-, methyl ester, [R*,S*-(E)]- (9CI)

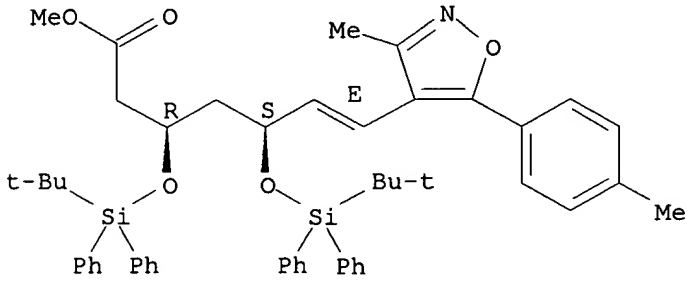
(CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



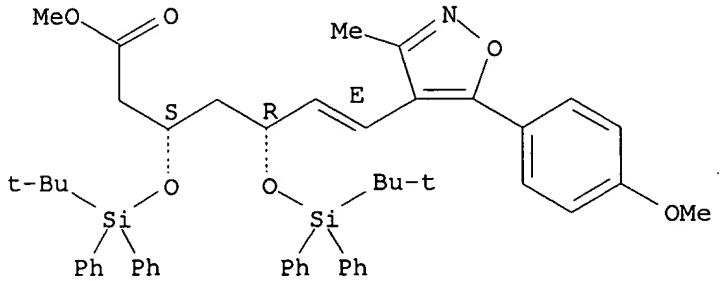
RN 113841-47-7 HCAPLUS
CN 6-Heptenoic acid, 3,5-bis[[(1,1-dimethylethyl)diphenylsilyl]oxy]-7-[3-methyl-5-(4-methylphenyl)-4-isoxazolyl]-, methyl ester, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



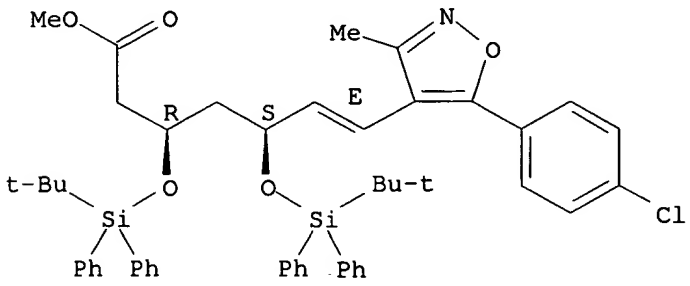
RN 113841-48-8 HCAPLUS
CN 6-Heptenoic acid, 3,5-bis[[(1,1-dimethylethyl)diphenylsilyl]oxy]-7-[5-(4-methoxyphenyl)-3-methyl-4-isoxazolyl]-, methyl ester, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



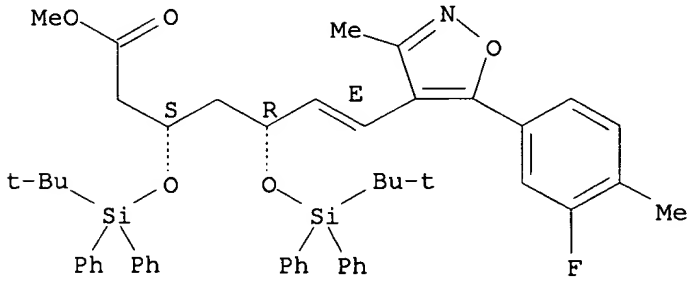
RN 113841-49-9 HCAPLUS
CN 6-Heptenoic acid, 7-[5-(4-chlorophenyl)-3-methyl-4-isoxazolyl]-3,5-bis[[(1,1-dimethylethyl)diphenylsilyl]oxy]-, methyl ester, [R*,S*-(E)]-(9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



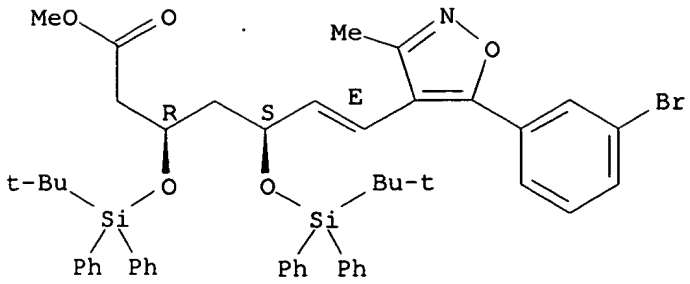
RN 113841-50-2 HCAPLUS
CN 6-Heptenoic acid, 3,5-bis[[(1,1-dimethylethyl)diphenylsilyl]oxy]-7-[5-(3-fluoro-4-methylphenyl)-3-methyl-4-isoxazolyl]-, methyl ester, [R*,S*-(E)]-(9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



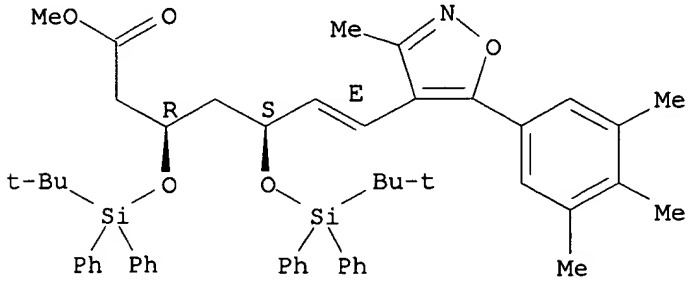
RN 113841-51-3 HCAPLUS
CN 6-Heptenoic acid, 7-[5-(3-bromophenyl)-3-methyl-4-isoxazolyl]-3,5-bis[[(1,1-dimethylethyl)diphenylsilyl]oxy]-, methyl ester, [R*,S*-(E)]-(9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



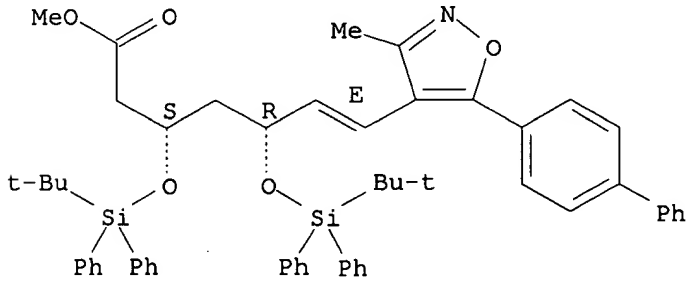
RN 113841-52-4 HCAPLUS
CN 6-Heptenoic acid, 3,5-bis[[(1,1-dimethylethyl)diphenylsilyl]oxy]-7-[3-methyl-5-(3,4,5-trimethylphenyl)-4-isoxazolyl]-, methyl ester, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

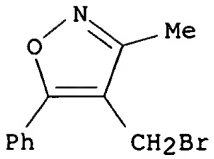


RN 113841-53-5 HCAPLUS
CN 6-Heptenoic acid, 7-(5-[1,1'-biphenyl]-4-yl-3-methyl-4-isoxazolyl)-3,5-bis[[(1,1-dimethylethyl)diphenylsilyl]oxy]-, methyl ester, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

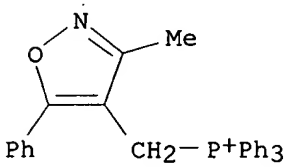
Relative stereochemistry.
Double bond geometry as shown.



RN 113841-59-1 HCAPLUS
CN Isoxazole, 4-(bromomethyl)-3-methyl-5-phenyl- (9CI) (CA INDEX NAME)

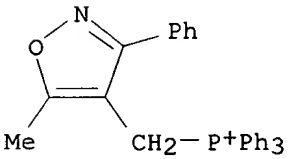


RN 113841-60-4 HCAPLUS
CN Phosphonium, [(3-methyl-5-phenyl-4-isoxazolyl)methyl]triphenyl-, chloride (9CI) (CA INDEX NAME)



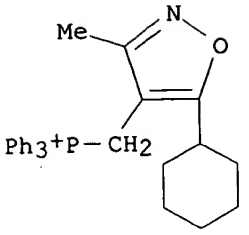
● $Cl^-$

RN 113841-61-5 HCAPLUS
CN Phosphonium, [(5-methyl-3-phenyl-4-isoxazolyl)methyl]triphenyl-, bromide (9CI) (CA INDEX NAME)



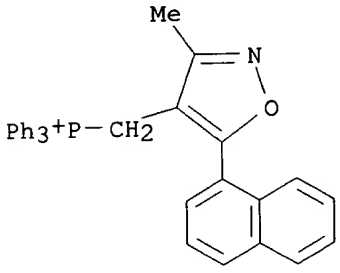
● $Br^-$

RN 113841-62-6 HCAPLUS
CN Phosphonium, [(5-cyclohexyl-3-methyl-4-isoxazolyl)methyl]triphenyl-, bromide (9CI) (CA INDEX NAME)



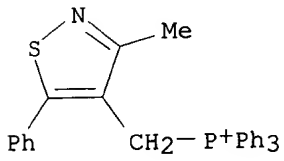
● $Br^-$

RN 113841-63-7 HCAPLUS
CN Phosphonium, [[3-methyl-5-(1-naphthalenyl)-4-isoxazolyl]methyl]triphenyl-, bromide (9CI) (CA INDEX NAME)



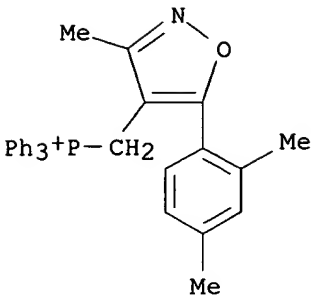
● $Br^-$

RN 113841-64-8 HCAPLUS
CN Phosphonium, [(3-methyl-5-phenyl-4-isothiazolyl)methyl]triphenyl-, bromide (9CI) (CA INDEX NAME)



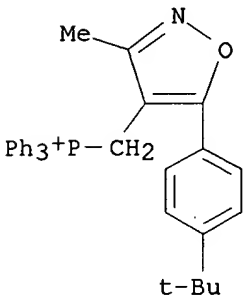
● $Br^-$

RN 113841-65-9 HCAPLUS
CN Phosphonium, [[5-(2,4-dimethylphenyl)-3-methyl-4-isoxazolyl]methyl]triphenyl-, bromide (9CI) (CA INDEX NAME)



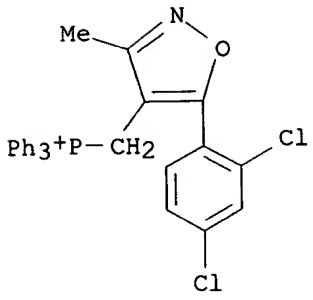
● $Br^-$

RN 113841-67-1 HCAPLUS
CN Phosphonium, [[5-[4-(1,1-dimethylethyl)phenyl]-3-methyl-4-isoxazolyl]methyl]triphenyl-, bromide (9CI) (CA INDEX NAME)



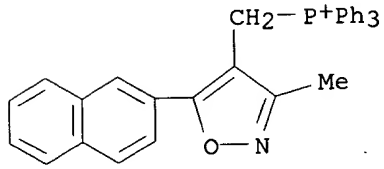
● $Br^-$

RN 113841-68-2 HCAPLUS
CN Phosphonium, [[5-(2,4-dichlorophenyl)-3-methyl-4-isoxazolyl]methyl]triphenyl-, bromide (9CI) (CA INDEX NAME)



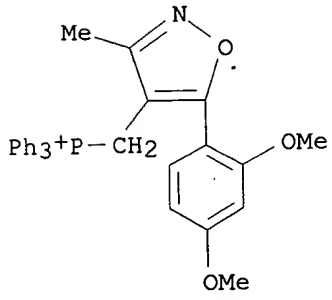
● $Br^-$

RN 113841-69-3 HCAPLUS
CN Phosphonium, [[3-methyl-5-(2-naphthalenyl)-4-isoxazolyl]methyl]triphenyl-, bromide (9CI) (CA INDEX NAME)



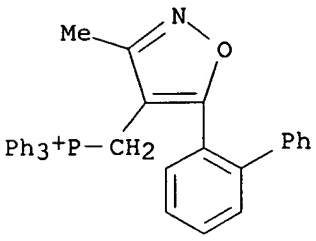
● $Br^-$

RN 113841-70-6 HCAPLUS
CN Phosphonium, [[5-(2,4-dimethoxyphenyl)-3-methyl-4-isoxazolyl]methyl]triphenyl-, bromide (9CI) (CA INDEX NAME)



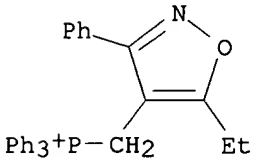
● $Br^-$

RN 113841-71-7 HCAPLUS
CN Phosphonium, [(5-[1,1'-biphenyl]-2-yl-3-methyl-4-isoxazolyl)methyl]triphenyl-, bromide (9CI) (CA INDEX NAME)



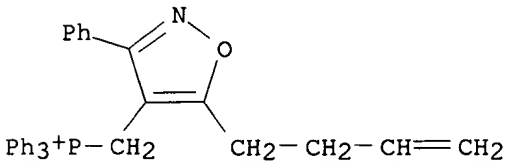
● $Br^-$

RN 113841-72-8 HCAPLUS
CN Phosphonium, [(5-ethyl-3-phenyl-4-isoxazolyl)methyl]triphenyl-, bromide (9CI) (CA INDEX NAME)



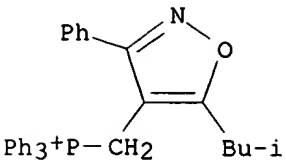
● $Br^-$

RN 113841-73-9 HCAPLUS
CN Phosphonium, [[5-(3-butenyl)-3-phenyl-4-isoxazolyl]methyl]triphenyl-, bromide (9CI) (CA INDEX NAME)



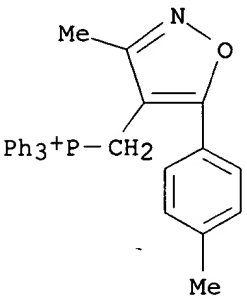
● $Br^-$

RN 113841-74-0 HCAPLUS
CN Phosphonium, [[5-(2-methylpropyl)-3-phenyl-4-isoxazolyl]methyl]triphenyl-, bromide (9CI) (CA INDEX NAME)



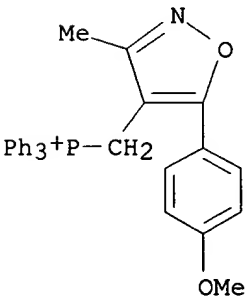
● $Br^-$

RN 113841-75-1 HCAPLUS
CN Phosphonium, [[3-methyl-5-(4-methylphenyl)-4-isoxazolyl]methyl]triphenyl-, bromide (9CI) (CA INDEX NAME)



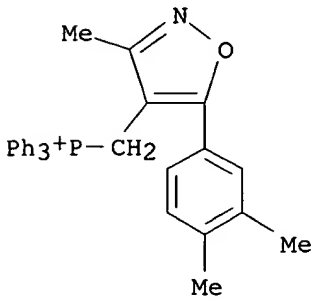
● $Br^-$

RN 113841-76-2 HCAPLUS
CN Phosphonium, [[5-(4-methoxyphenyl)-3-methyl-4-isoxazolyl]methyl]triphenyl-, bromide (9CI) (CA INDEX NAME)



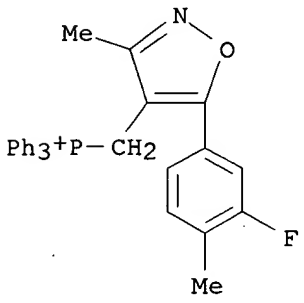
● $Br^-$

RN 113841-77-3 HCAPLUS
CN Phosphonium, [[5-(3,4-dimethylphenyl)-3-methyl-4-isoxazolyl]methyl]triphenyl-, bromide (9CI) (CA INDEX NAME)



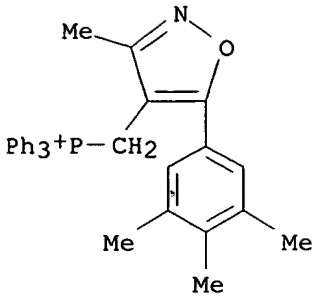
● $Br^-$

RN 113841-78-4 HCAPLUS
CN Phosphonium, [[5-(3-fluoro-4-methylphenyl)-3-methyl-4-isoxazolyl]methyl]triphenyl-, bromide (9CI) (CA INDEX NAME)



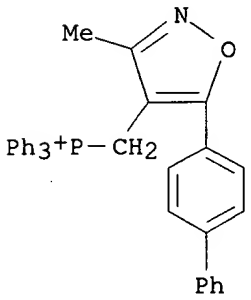
● $Br^-$

RN 113841-79-5 HCAPLUS
CN Phosphonium, [[3-methyl-5-(3,4,5-trimethylphenyl)-4-isoxazolyl]methyl]triphenyl-, bromide (9CI) (CA INDEX NAME)



● $Br^-$

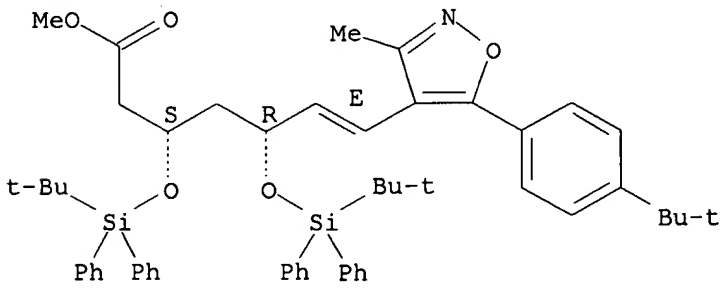
RN 113841-80-8 HCAPLUS
CN Phosphonium, [(5-[1,1'-biphenyl]-4-yl-3-methyl-4-isoxazolyl)methyl]triphenyl-, bromide (9CI) (CA INDEX NAME)

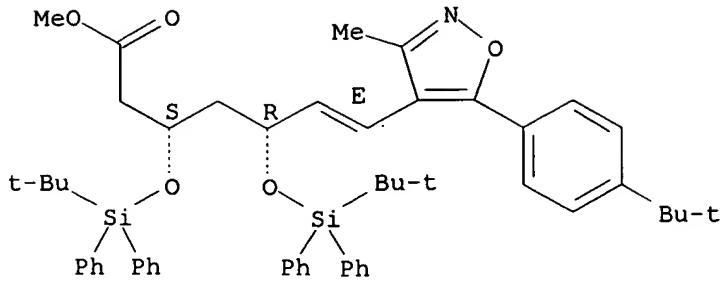


● $Br^-$

RN 113879-76-8 HCAPLUS
CN 6-Heptenoic acid, 3,5-bis[[(1,1-dimethylethyl)diphenylsilyl]oxy]-7-[5-[4-(1,1-dimethylethyl)phenyl]-3-methyl-4-isoxazolyl]-, methyl ester, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

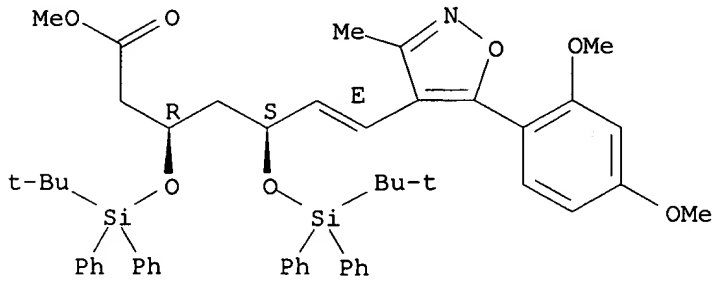
Relative stereochemistry.
Double bond geometry as shown.





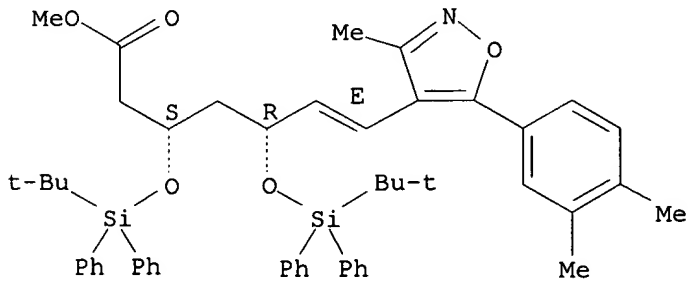
RN 113879-77-9 HCAPLUS
CN 6-Heptenoic acid, 7-[5-(2,4-dimethoxyphenyl)-3-methyl-4-isoxazolyl]-3,5-bis[[(1,1-dimethylethyl)diphenylsilyl]oxy]-, methyl ester, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

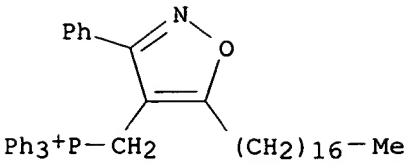


RN 113879-78-0 HCAPLUS
CN 6-Heptenoic acid, 3,5-bis[[(1,1-dimethylethyl)diphenylsilyl]oxy]-7-[5-(3,4-dimethylphenyl)-3-methyl-4-isoxazolyl]-, methyl ester, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

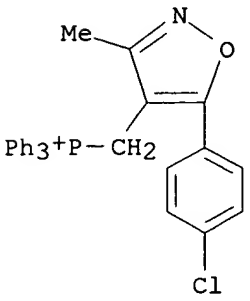


RN 113879-79-1 HCAPLUS
CN Phosphonium, [(5-heptadecyl-3-phenyl-4-isoxazolyl)methyl]triphenyl-, bromide (9CI) (CA INDEX NAME)



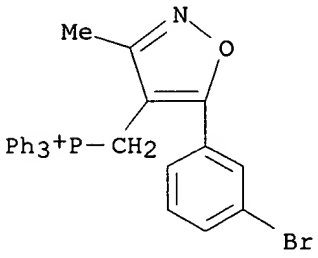
● $Br^-$

RN 113879-80-4 HCAPLUS
CN Phosphonium, [[5-(4-chlorophenyl)-3-methyl-4-isoxazolyl]methyl]triphenyl-, bromide (9CI) (CA INDEX NAME)



● $Br^-$

RN 113879-81-5 HCAPLUS
CN Phosphonium, [[5-(3-bromophenyl)-3-methyl-4-isoxazolyl]methyl]triphenyl-, bromide (9CI) (CA INDEX NAME)



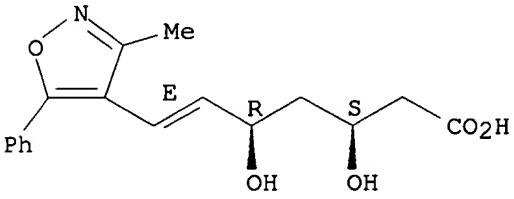
● $Br^-$

IT **113826-46-3P 113826-47-4P 113826-48-5P**
**113826-49-6P 113826-50-9P 113826-51-0P**
**113826-52-1P 113826-53-2P 113826-54-3P**

**113826-55-4P 113826-56-5P 113826-57-6P**
**113826-58-7P 113826-59-8P 113826-60-1P**
**113826-61-2P 113826-62-3P 113826-63-4P**
**113826-64-5P 113826-65-6P 113826-66-7P**
**113826-67-8P 113826-68-9P 113826-69-0P**
**113826-70-3P 113826-71-4P 113826-72-5P**
**113826-73-6P 113826-74-7P 113826-75-8P**
**113826-76-9P 113826-77-0P 113826-78-1P**
**113826-79-2P 113826-80-5P 113826-81-6P**
**113826-82-7P 113826-83-8P 113826-84-9P**
**113826-85-0P 113826-86-1P 113830-85-6P**
**113842-01-6P 113842-02-7P 113842-03-8P**
**113842-04-9P 113842-05-0P 113842-06-1P**
RL: SPN (Synthetic preparation); **PREP (Preparation)**
(prepn. of, as hypolipemic)

RN 113826-46-3 HCAPLUS
CN 6-Heptenoic acid, 3,5-dihydroxy-7-(3-methyl-5-phenyl-4-isoxazolyl)-, monosodium salt, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

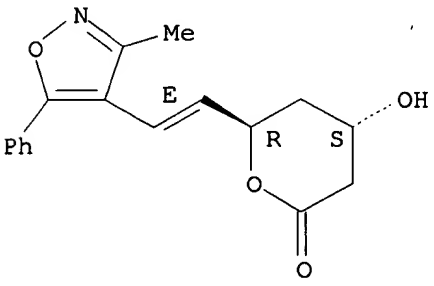
Relative stereochemistry.
Double bond geometry as shown.




● Na

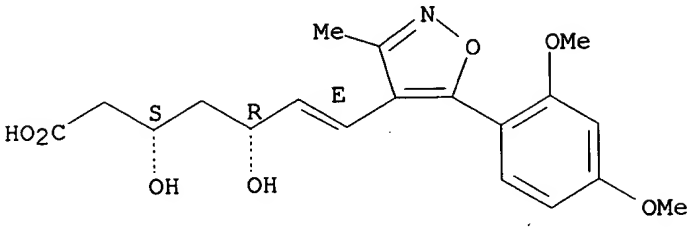
RN 113826-47-4 HCAPLUS
CN 2H-Pyran-2-one, tetrahydro-4-hydroxy-6-[2-(3-methyl-5-phenyl-4-isoxazolyl)ethenyl]-, [4.alpha.,6.beta.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.




RN 113826-48-5 HCAPLUS
CN 6-Heptenoic acid, 7-[5-(2,4-dimethoxyphenyl)-3-methyl-4-isoxazolyl]-3,5-dihydroxy-, monosodium salt, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

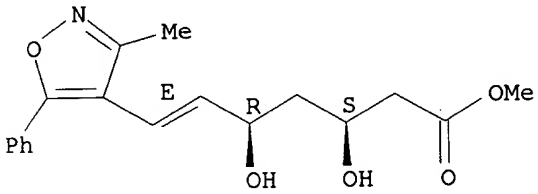
Relative stereochemistry.
Double bond geometry as shown.




● Na

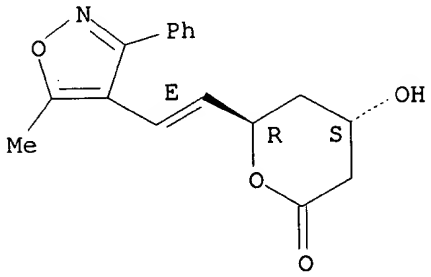
RN 113826-49-6 HCAPLUS
CN 6-Heptenoic acid, 3,5-dihydroxy-7-(3-methyl-5-phenyl-4-isoxazolyl)-, methyl ester, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



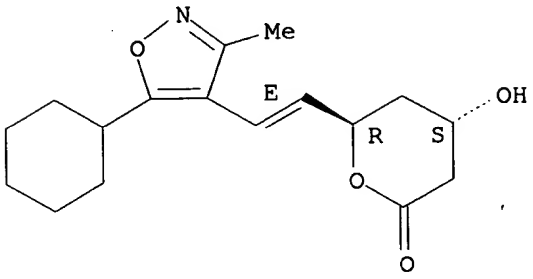

RN 113826-50-9 HCAPLUS
CN 2H-Pyran-2-one, tetrahydro-4-hydroxy-6-[2-(5-methyl-3-phenyl-4-isoxazolyl)ethenyl]-, [4.alpha.,6.beta.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



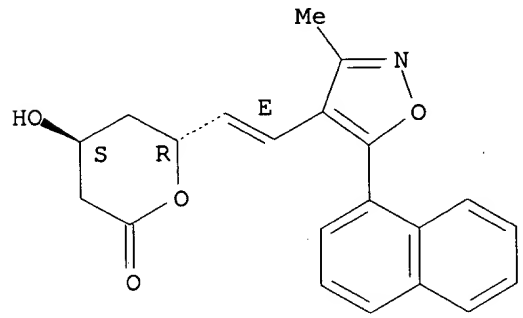

RN 113826-51-0 HCAPLUS
CN 2H-Pyran-2-one, 6-[2-(5-cyclohexyl-3-methyl-4-isoxazolyl)ethenyl]tetrahydro-4-hydroxy-, [4.alpha.,6.beta.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



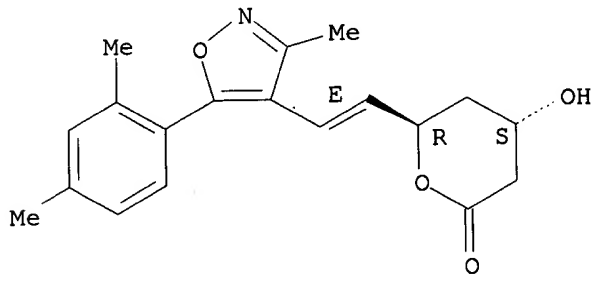

RN 113826-52-1 HCAPLUS
CN 2H-Pyran-2-one, tetrahydro-4-hydroxy-6-[2-[3-methyl-5-(1-naphthalenyl)-4-isoxazolyl]ethenyl]-, [4.alpha.,6.beta.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.




RN 113826-53-2 HCAPLUS
CN 2H-Pyran-2-one, 6-[2-[5-(2,4-dimethylphenyl)-3-methyl-4-isoxazolyl]ethenyl]tetrahydro-4-hydroxy-, [4.alpha.,6.beta.(E)]- (9CI) (CA INDEX NAME)

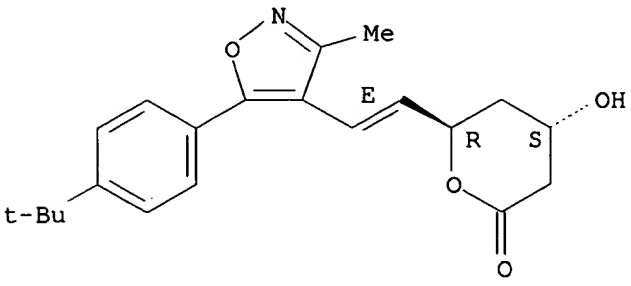
Relative stereochemistry.
Double bond geometry as shown.




RN 113826-54-3 HCAPLUS

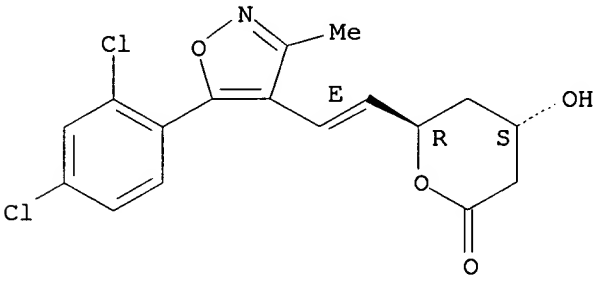
CN 2H-Pyran-2-one, 6-[2-[5-[4-(1,1-dimethylethyl)phenyl]-3-methyl-4-isoxazolyl]ethenyl]tetrahydro-4-hydroxy-, [4.alpha.,6.beta.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



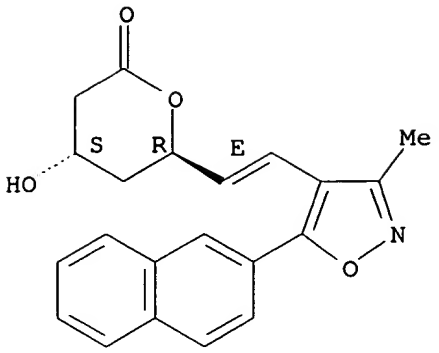

RN 113826-55-4 HCAPLUS
CN 2H-Pyran-2-one, 6-[2-[5-(2,4-dichlorophenyl)-3-methyl-4-isoxazolyl]ethenyl]tetrahydro-4-hydroxy-, [4.alpha.,6.beta.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



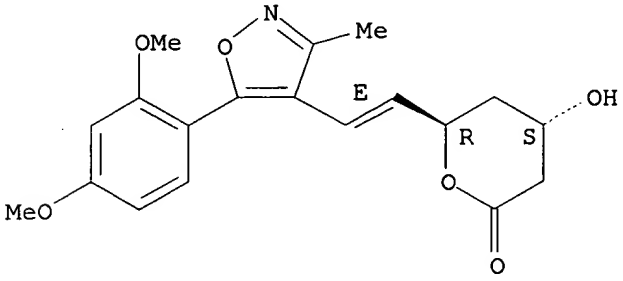

RN 113826-56-5 HCAPLUS
CN 2H-Pyran-2-one, tetrahydro-4-hydroxy-6-[2-[3-methyl-5-(2-naphthalenyl)-4-isoxazolyl]ethenyl]-, [4.alpha.,6.beta.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



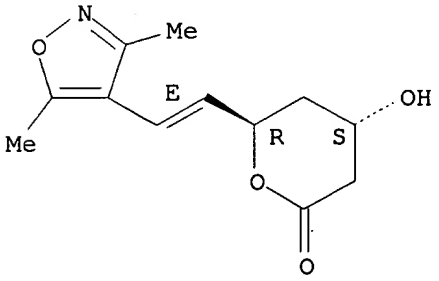
RN 113826-57-6 HCAPLUS
CN 2H-Pyran-2-one, 6-[2-[5-(2,4-dimethoxyphenyl)-3-methyl-4-isoxazolyl]ethenyl]tetrahydro-4-hydroxy-, [4.alpha.,6.beta.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



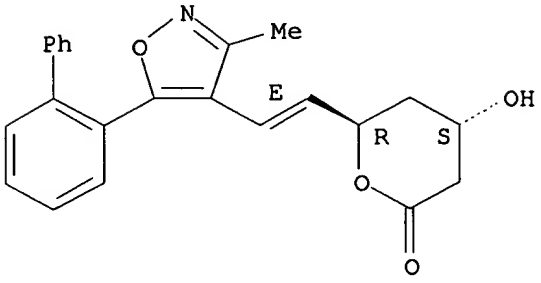
RN 113826-58-7 HCAPLUS
CN 2H-Pyran-2-one, 6-[2-(3,5-dimethyl-4-isoxazolyl)ethenyl]tetrahydro-4-hydroxy-, [4.alpha.,6.beta.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



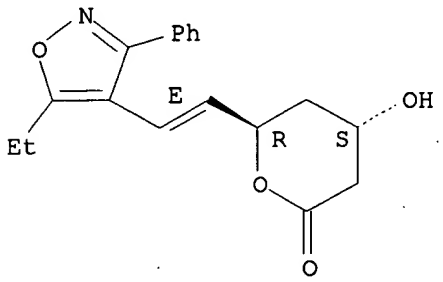
RN 113826-59-8 HCAPLUS
CN 2H-Pyran-2-one, 6-[2-(5-[1,1'-biphenyl]-2-yl-3-methyl-4-isoxazolyl)ethenyl]tetrahydro-4-hydroxy-, [4.alpha.,6.beta.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



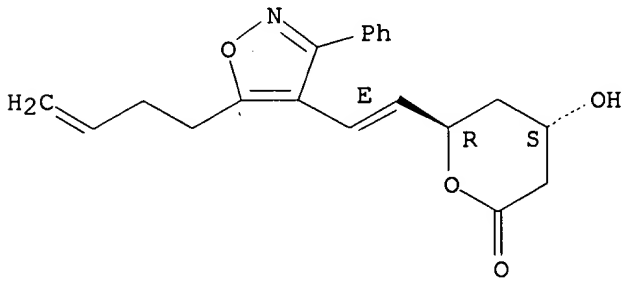

RN 113826-60-1 HCAPLUS
CN 2H-Pyran-2-one, 6-[2-(5-ethyl-3-phenyl-4-isoxazolyl)ethenyl]tetrahydro-4-hydroxy-, [4.alpha.,6.beta.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.




RN 113826-61-2 HCAPLUS
CN 2H-Pyran-2-one, 6-[2-[5-(3-butenyl)-3-phenyl-4-isoxazolyl]ethenyl]tetrahydro-4-hydroxy-, [4.alpha.,6.beta.(E)]- (9CI) (CA INDEX NAME)

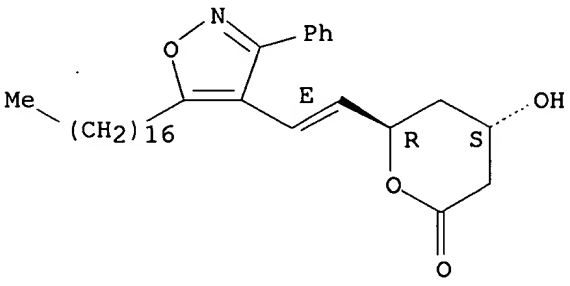
Relative stereochemistry.
Double bond geometry as shown.




RN 113826-62-3 HCAPLUS
CN 2H-Pyran-2-one, 6-[2-(5-heptadecyl-3-phenyl-4-

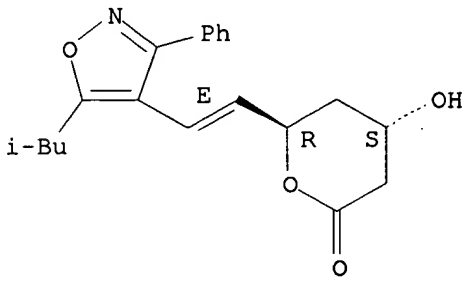
isoxazolyl)ethenyl]tetrahydro-4-hydroxy-, [4.alpha.,6.beta.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



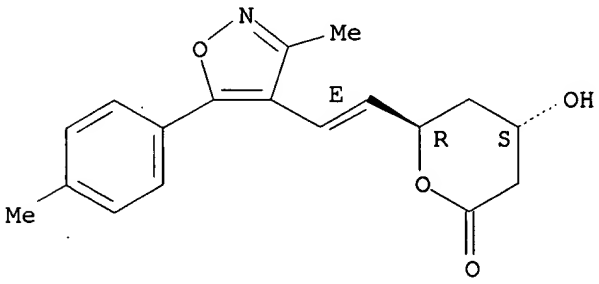

RN 113826-63-4 HCAPLUS
CN 2H-Pyran-2-one, tetrahydro-4-hydroxy-6-[2-[5-(2-methylpropyl)-3-phenyl-4-isoxazolyl]ethenyl]-, [4.alpha.,6.beta.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.




RN 113826-64-5 HCAPLUS
CN 2H-Pyran-2-one, tetrahydro-4-hydroxy-6-[2-[3-methyl-5-(4-methylphenyl)-4-isoxazolyl]ethenyl]-, [4.alpha.,6.beta.(E)]- (9CI) (CA INDEX NAME)

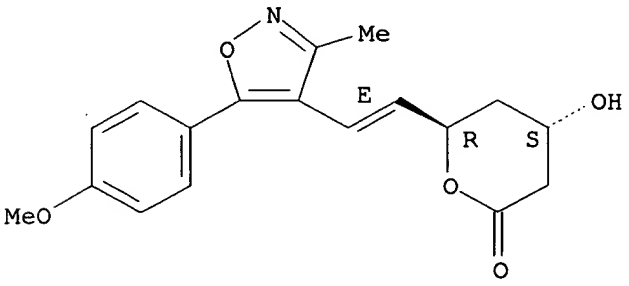
Relative stereochemistry.
Double bond geometry as shown.




RN 113826-65-6 HCAPLUS

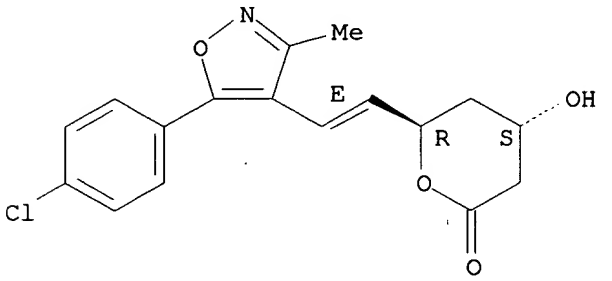
CN 2H-Pyran-2-one, tetrahydro-4-hydroxy-6-[2-[5-(4-methoxyphenyl)-3-methyl-4-isoxazolyl]ethenyl]-, [4.alpha.,6.beta.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



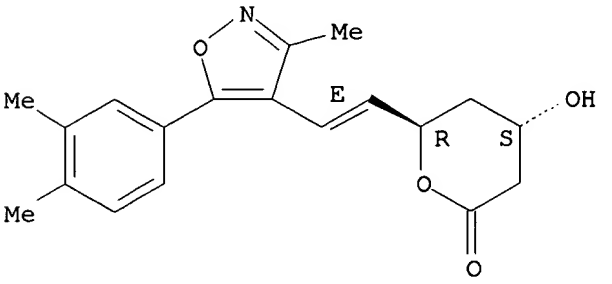

RN 113826-66-7 HCAPLUS
CN 2H-Pyran-2-one, 6-[2-[5-(4-chlorophenyl)-3-methyl-4-isoxazolyl]ethenyl]tetrahydro-4-hydroxy-, [4.alpha.,6.beta.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



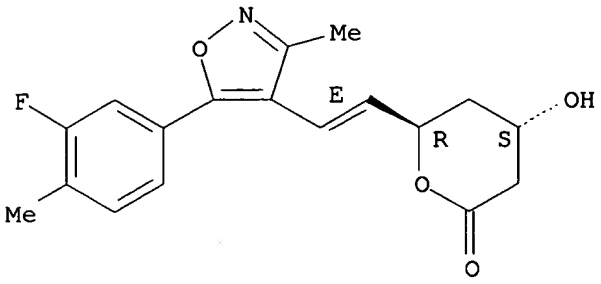

RN 113826-67-8 HCAPLUS
CN 2H-Pyran-2-one, 6-[2-[5-(3,4-dimethylphenyl)-3-methyl-4-isoxazolyl]ethenyl]tetrahydro-4-hydroxy-, [4.alpha.,6.beta.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



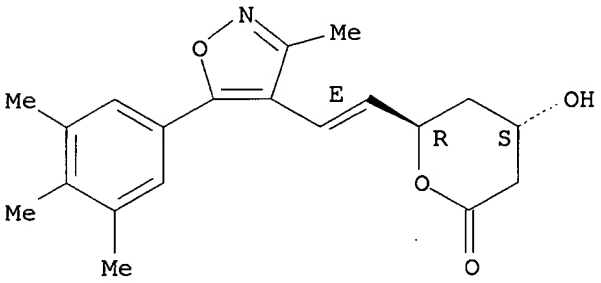
RN 113826-68-9 HCAPLUS
CN 2H-Pyran-2-one, 6-[2-[5-(3-fluoro-4-methylphenyl)-3-methyl-4-isoxazolyl]ethenyl]tetrahydro-4-hydroxy-, [4.alpha.,6.beta.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



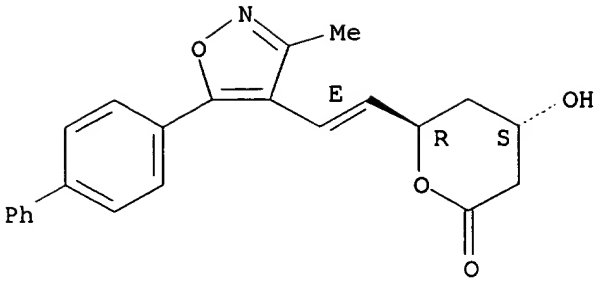

RN 113826-69-0 HCAPLUS
CN 2H-Pyran-2-one, tetrahydro-4-hydroxy-6-[2-[3-methyl-5-(3,4,5-trimethylphenyl)-4-isoxazolyl]ethenyl]-, [4.alpha.,6.beta.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



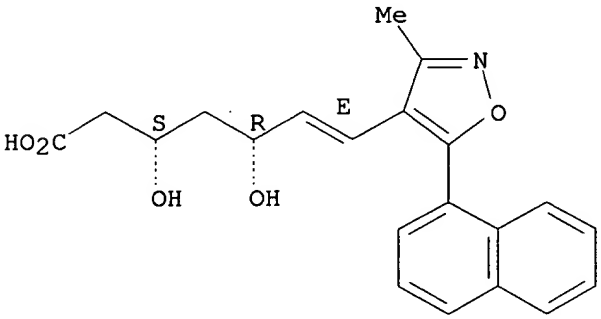

RN 113826-70-3 HCAPLUS
CN 2H-Pyran-2-one, 6-[2-(5-[1,1'-biphenyl]-4-yl-3-methyl-4-isoxazolyl)ethenyl]tetrahydro-4-hydroxy-, [4.alpha.,6.beta.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



RN 113826-71-4 HCAPLUS
CN 6-Heptenoic acid, 3,5-dihydroxy-7-[3-methyl-5-(1-naphthalenyl)-4-isoxazolyl]-, monosodium salt, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

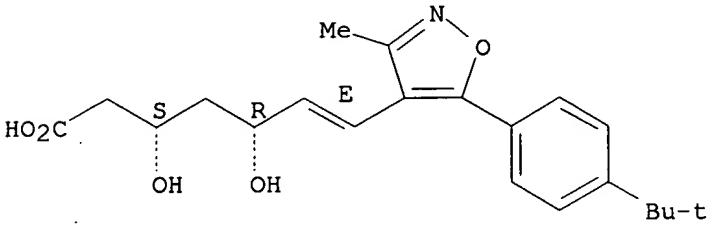
Relative stereochemistry.
Double bond geometry as shown.



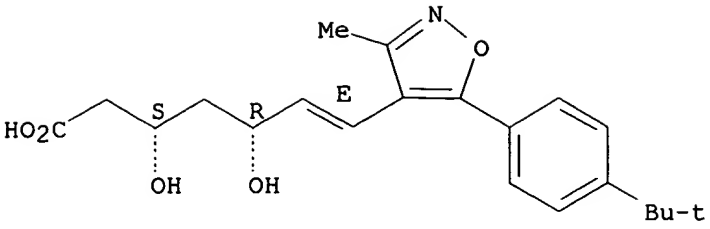
● Na

RN 113826-72-5 HCAPLUS
CN 6-Heptenoic acid, 7-[5-[4-(1,1-dimethylethyl)phenyl]-3-methyl-4-isoxazolyl]-3,5-dihydroxy-, monosodium salt, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



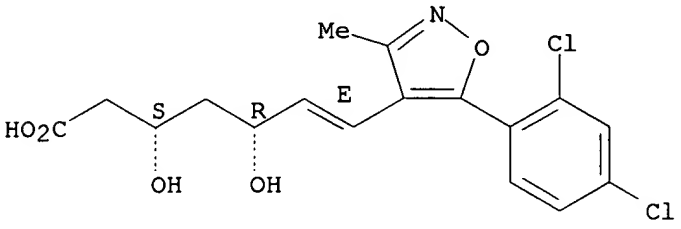
● Na




● Na

RN 113826-73-6 HCAPLUS
CN 6-Heptenoic acid, 7-[5-(2,4-dichlorophenyl)-3-methyl-4-isoxazolyl]-3,5-dihydroxy-, monosodium salt, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

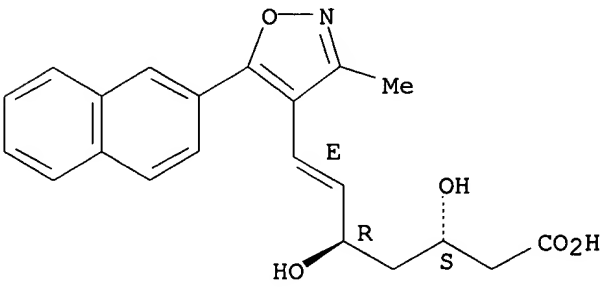
Relative stereochemistry.
Double bond geometry as shown.




● Na

RN 113826-74-7 HCAPLUS
CN 6-Heptenoic acid, 3,5-dihydroxy-7-[3-methyl-5-(2-naphthalenyl)-4-isoxazolyl]-, monosodium salt, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

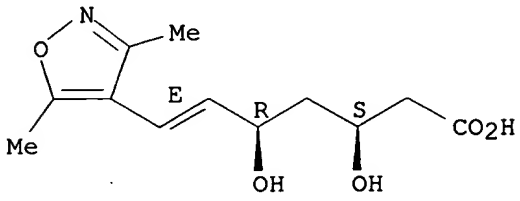
Relative stereochemistry.
Double bond geometry as shown.




● Na

RN 113826-75-8 HCAPLUS
CN 6-Heptenoic acid, 7-(3,5-dimethyl-4-isoxazolyl)-3,5-dihydroxy-, monosodium salt, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

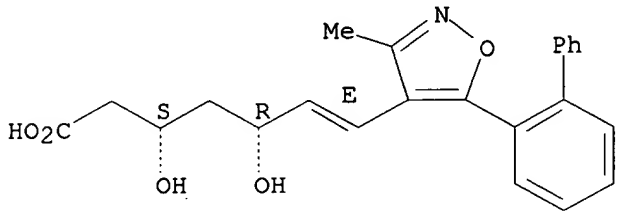
Relative stereochemistry.
Double bond geometry as shown.




● Na

RN 113826-76-9 HCAPLUS
CN 6-Heptenoic acid, 7-(5-[1,1'-biphenyl]-2-yl-3-methyl-4-isoxazolyl)-3,5-dihydroxy-, monosodium salt, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

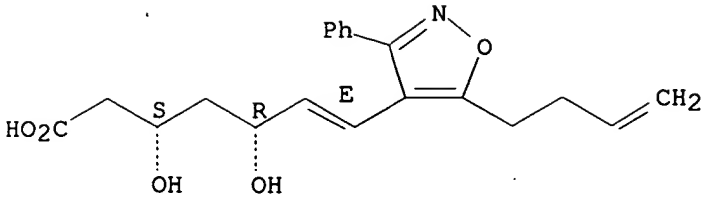
Relative stereochemistry.
Double bond geometry as shown.




● Na

RN 113826-77-0 HCAPLUS
CN 6-Heptenoic acid, 7-[5-(3-butenyl)-3-phenyl-4-isoxazolyl]-3,5-dihydroxy-, monosodium salt, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

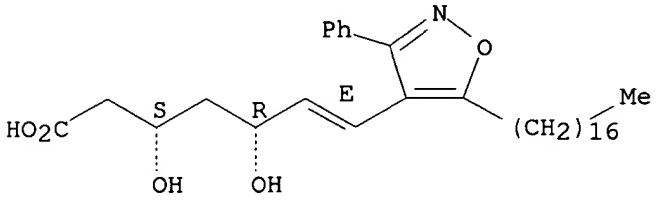
Relative stereochemistry.
Double bond geometry as shown.



● Na

RN 113826-78-1 HCAPLUS
CN 6-Heptenoic acid, 7-(5-heptadecyl-3-phenyl-4-isoxazolyl)-3,5-dihydroxy-, monosodium salt, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

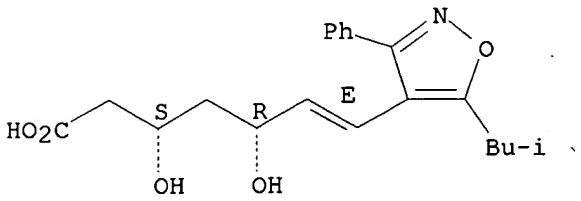
Relative stereochemistry.
Double bond geometry as shown.



● Na

RN 113826-79-2 HCAPLUS
CN 6-Heptenoic acid, 3,5-dihydroxy-7-[5-(2-methylpropyl)-3-phenyl-4-isoxazolyl]-, monosodium salt, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

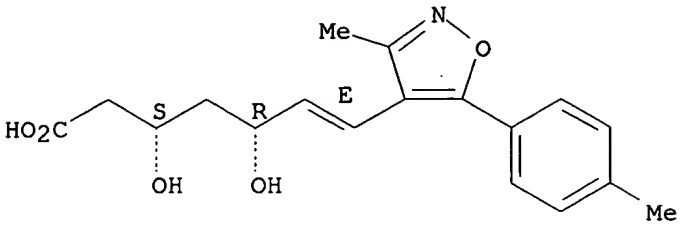
Relative stereochemistry.
Double bond geometry as shown.



● Na

RN 113826-80-5 HCAPLUS
CN 6-Heptenoic acid, 3,5-dihydroxy-7-[3-methyl-5-(4-methylphenyl)-4-isoxazolyl]-, monosodium salt, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

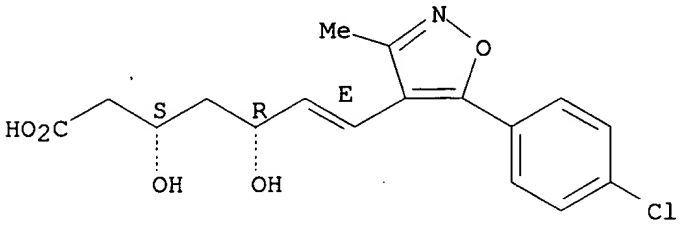
Relative stereochemistry.
Double bond geometry as shown.




● Na

RN 113826-81-6 HCAPLUS
CN 6-Heptenoic acid, 7-[5-(4-chlorophenyl)-3-methyl-4-isoxazolyl]-3,5-dihydroxy-, monosodium salt, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

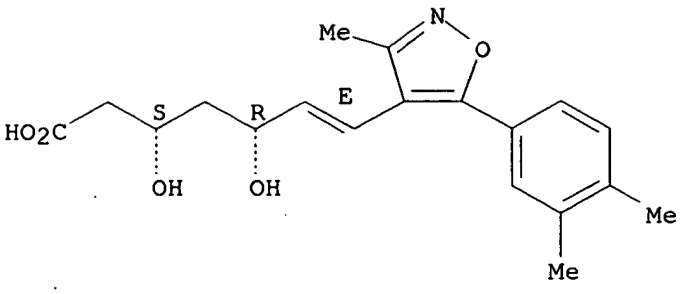
Relative stereochemistry.
Double bond geometry as shown.




● Na

RN 113826-82-7 HCAPLUS
CN 6-Heptenoic acid, 7-[5-(3,4-dimethylphenyl)-3-methyl-4-isoxazolyl]-3,5-dihydroxy-, monosodium salt, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

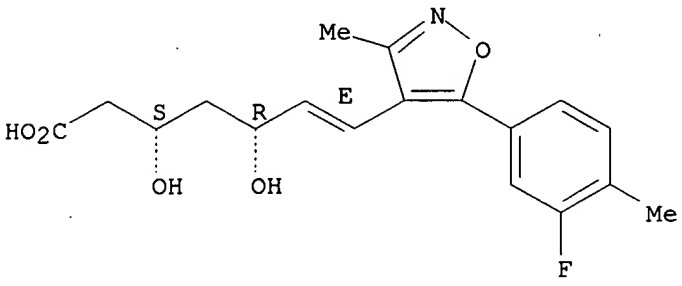
Relative stereochemistry.
Double bond geometry as shown.




● Na

RN 113826-83-8 HCAPLUS
CN 6-Heptenoic acid, 7-[5-(3-fluoro-4-methylphenyl)-3-methyl-4-isoxazolyl]-3,5-dihydroxy-, monosodium salt, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

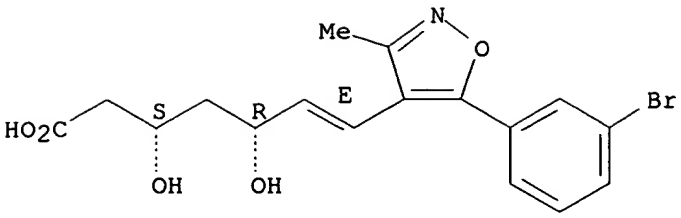
Relative stereochemistry.
Double bond geometry as shown.




● Na

RN 113826-84-9 HCAPLUS
CN 6-Heptenoic acid, 7-[5-(3-bromophenyl)-3-methyl-4-isoxazolyl]-3,5-dihydroxy-, monosodium salt, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

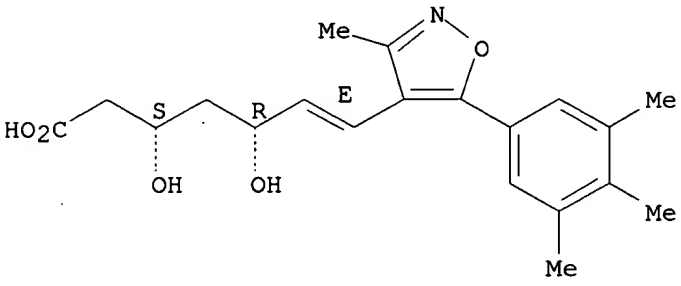
Relative stereochemistry.
Double bond geometry as shown.




● Na

RN 113826-85-0 HCAPLUS
CN 6-Heptenoic acid, 3,5-dihydroxy-7-[3-methyl-5-(3,4,5-trimethylphenyl)-4-isoxazolyl]-, monosodium salt, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

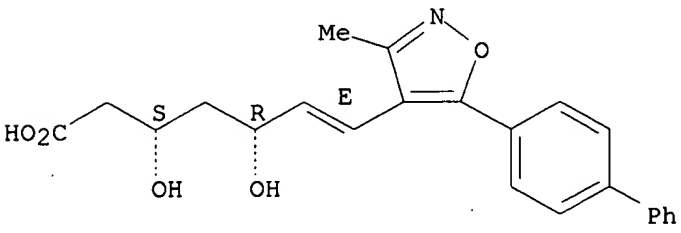
Relative stereochemistry.
Double bond geometry as shown.




● Na

RN 113826-86-1 HCAPLUS
CN 6-Heptenoic acid, 7-(5-[1,1'-biphenyl]-4-yl-3-methyl-4-isoxazolyl)-3,5-dihydroxy-, monosodium salt, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

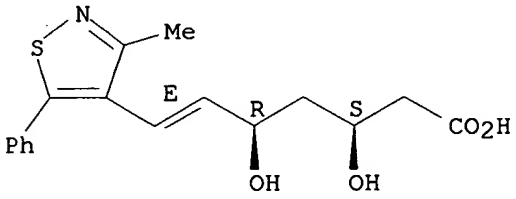
Relative stereochemistry.
Double bond geometry as shown.




● Na

RN 113830-85-6 HCAPLUS
CN 6-Heptenoic acid, 3,5-dihydroxy-7-(3-methyl-5-phenyl-4-isothiazolyl)-, monosodium salt, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

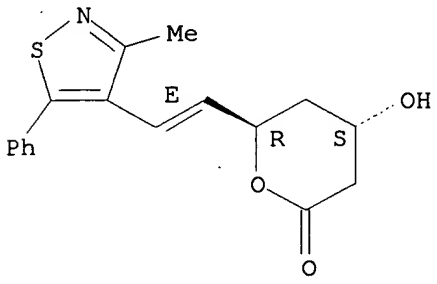
Relative stereochemistry.
Double bond geometry as shown.




● Na

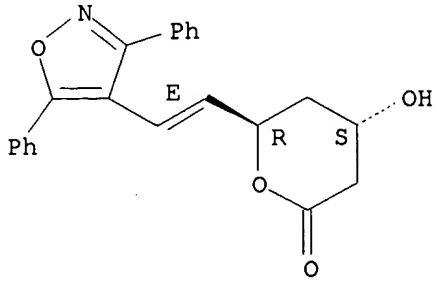
RN 113842-01-6 HCAPLUS
CN 2H-Pyran-2-one, tetrahydro-4-hydroxy-6-[2-(3-methyl-5-phenyl-4-isothiazolyl)ethenyl]-, [4.alpha.,6.beta.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



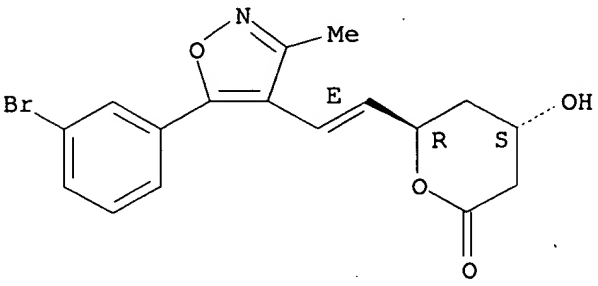

RN 113842-02-7 HCAPLUS
CN 2H-Pyran-2-one, 6-[2-(3,5-diphenyl-4-isoxazolyl)ethenyl]tetrahydro-4-hydroxy-, [4.alpha.,6.beta.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



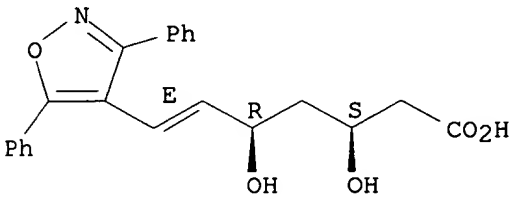
RN 113842-03-8 HCAPLUS
CN 2H-Pyran-2-one, 6-[2-[5-(3-bromophenyl)-3-methyl-4-isoxazolyl]ethenyl]tetrahydro-4-hydroxy-, [4.alpha.,6.beta.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.




RN 113842-04-9 HCAPLUS
CN 6-Heptenoic acid, 7-(3,5-diphenyl-4-isoxazolyl)-3,5-dihydroxy-, monosodium salt, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

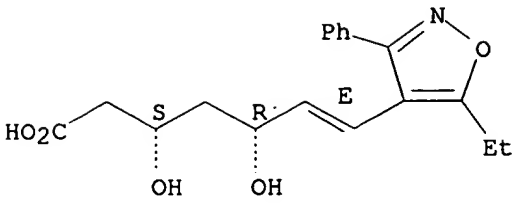
Relative stereochemistry.
Double bond geometry as shown.




● Na

RN 113842-05-0 HCAPLUS
CN 6-Heptenoic acid, 7-(5-ethyl-3-phenyl-4-isoxazolyl)-3,5-dihydroxy-, monosodium salt, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

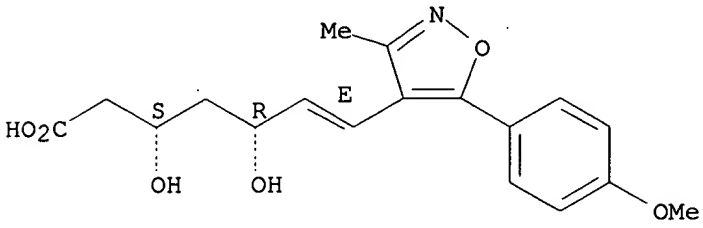
Relative stereochemistry.
Double bond geometry as shown.



● Na

RN 113842-06-1 HCAPLUS
CN 6-Heptenoic acid, 3,5-dihydroxy-7-[5-(4-methoxyphenyl)-3-methyl-4-isoxazolyl]-, monosodium salt, [R*,S*-(E)]- (9CI) (CA INDEX NAME)

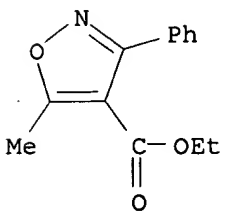
Relative stereochemistry.
Double bond geometry as shown.

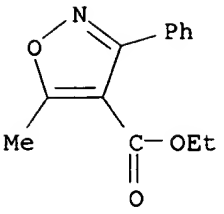


● Na

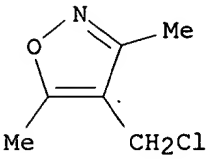
IT **1143-82-4 19788-37-5 24477-14-3**
**92029-29-3 99299-07-7 113841-30-8**
**113841-31-9 113841-81-9 113841-82-0**
**113841-83-1 113841-84-2 113841-85-3**
**113841-86-4 113841-87-5 113841-88-6**
**113841-89-7 113841-90-0 113841-91-1**
**113841-92-2 113841-93-3 113841-94-4**
**113841-95-5 113841-96-6 113841-97-7**
**113841-98-8 113841-99-9 113842-00-5**
RL: RCT (Reactant)
(reaction of, in prepn. of hypolipemics)

RN 1143-82-4 HCAPLUS
CN 4-Isoxazolecarboxylic acid, 5-methyl-3-phenyl-, ethyl ester (7CI, 8CI, 9CI) (CA INDEX NAME)

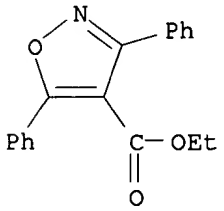




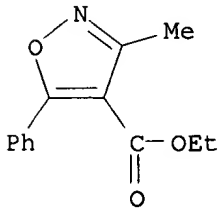
RN 19788-37-5 HCAPLUS
CN Isoxazole, 4-(chloromethyl)-3,5-dimethyl- (6CI, 8CI, 9CI) (CA INDEX NAME)



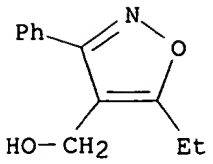
RN 24477-14-3 HCAPLUS
CN 4-Isoxazolecarboxylic acid, 3,5-diphenyl-, ethyl ester (6CI, 8CI, 9CI) (CA INDEX NAME)



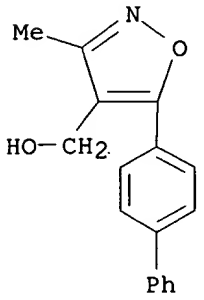
RN 92029-29-3 HCAPLUS
CN 4-Isoxazolecarboxylic acid, 3-methyl-5-phenyl-, ethyl ester (7CI, 9CI) (CA INDEX NAME)



RN 99299-07-7 HCAPLUS
CN 4-Isoxazolemethanol, 5-ethyl-3-phenyl- (9CI) (CA INDEX NAME)

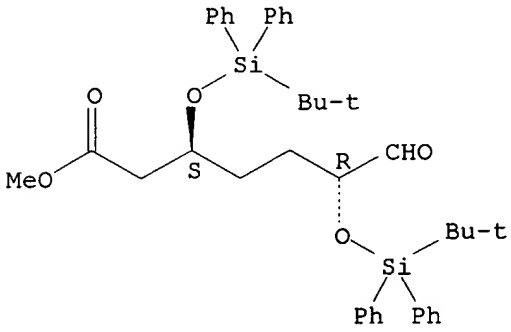


RN 113841-30-8 HCAPLUS
CN 4-Isoxazolemethanol, 5-[1,1'-biphenyl]-4-yl-3-methyl- (9CI) (CA INDEX NAME)

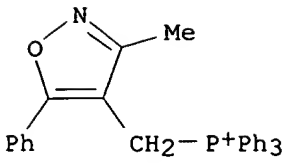


RN 113841-31-9 HCAPLUS
CN Heptanoic acid, 3,6-bis[[(1,1-dimethylethyl)diphenylsilyl]oxy]-7-oxo-, methyl ester, (R*,S*)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

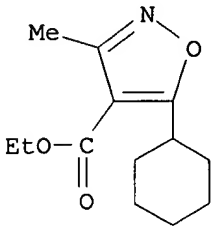


RN 113841-81-9 HCAPLUS
CN Phosphonium, [(3-methyl-5-phenyl-4-isoxazolyl)methyl]triphenyl-, bromide (9CI) (CA INDEX NAME)

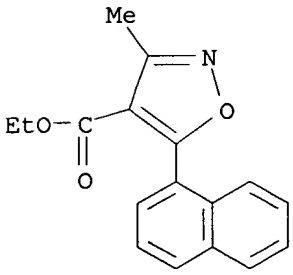


● $Br^-$

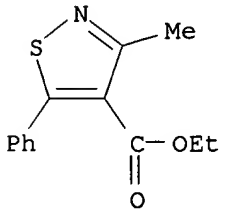
RN 113841-82-0 HCAPLUS
CN 4-Isoxazolecarboxylic acid, 5-cyclohexyl-3-methyl-, ethyl ester (9CI) (CA INDEX NAME)



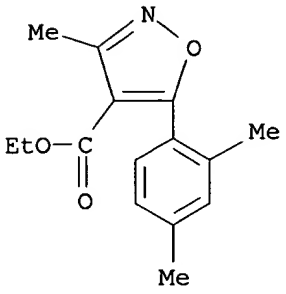
RN 113841-83-1 HCAPLUS
CN 4-Isoxazolecarboxylic acid, 3-methyl-5-(1-naphthalenyl)-, ethyl ester (9CI) (CA INDEX NAME)



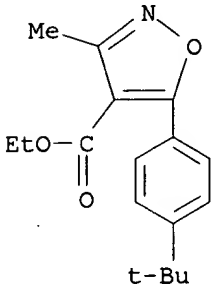
RN 113841-84-2 HCAPLUS
CN 4-Isothiazolecarboxylic acid, 3-methyl-5-phenyl-, ethyl ester (9CI) (CA INDEX NAME)



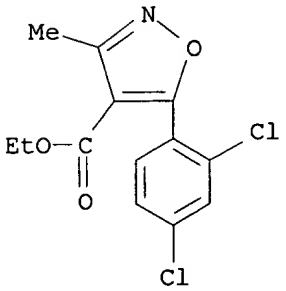
RN 113841-85-3 HCAPLUS
CN 4-Isoxazolecarboxylic acid, 5-(2,4-dimethylphenyl)-3-methyl-, ethyl ester (9CI) (CA INDEX NAME)



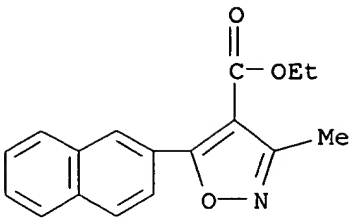
RN 113841-86-4 HCAPLUS
CN 4-Isoxazolecarboxylic acid, 5-[4-(1,1-dimethylethyl)phenyl]-3-methyl-, ethyl ester (9CI) (CA INDEX NAME)



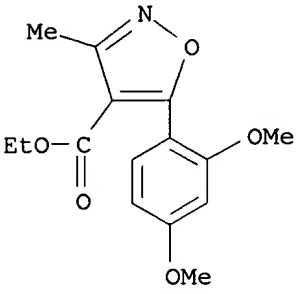
RN 113841-87-5 HCAPLUS
CN 4-Isoxazolecarboxylic acid, 5-(2,4-dichlorophenyl)-3-methyl-, ethyl ester (9CI) (CA INDEX NAME)



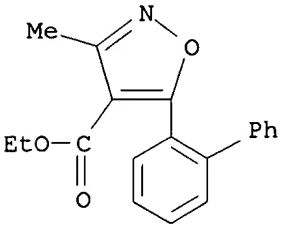
RN 113841-88-6 HCAPLUS
CN 4-Isoxazolecarboxylic acid, 3-methyl-5-(2-naphthalenyl)-, ethyl ester (9CI) (CA INDEX NAME)



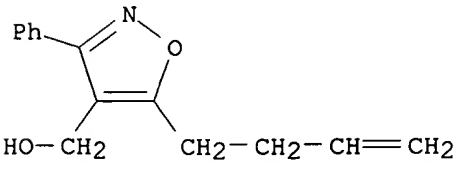
RN 113841-89-7 HCAPLUS
CN 4-Isoxazolecarboxylic acid, 5-(2,4-dimethoxyphenyl)-3-methyl-, ethyl ester (9CI) (CA INDEX NAME)



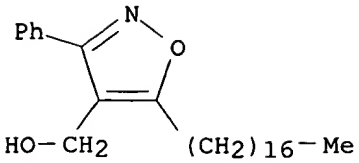
RN 113841-90-0 HCAPLUS
CN 4-Isoxazolecarboxylic acid, 5-[1,1'-biphenyl]-2-yl-3-methyl-, ethyl ester (9CI) (CA INDEX NAME)



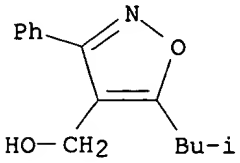
RN 113841-91-1 HCAPLUS
CN 4-Isoxazolemethanol, 5-(3-butenyl)-3-phenyl- (9CI) (CA INDEX NAME)



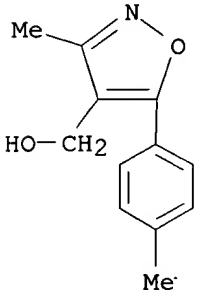
RN 113841-92-2 HCAPLUS
CN 4-Isoxazolemethanol, 5-heptadecyl-3-phenyl- (9CI) (CA INDEX NAME)



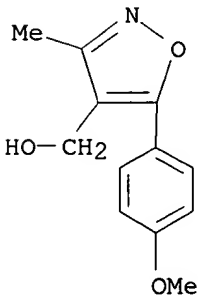
RN 113841-93-3 HCAPLUS
CN 4-Isoxazolemethanol, 5-(2-methylpropyl)-3-phenyl- (9CI) (CA INDEX NAME)



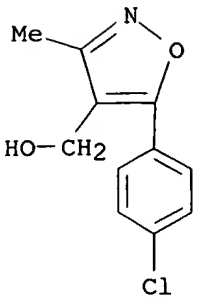
RN 113841-94-4 HCAPLUS
CN 4-Isoxazolemethanol, 3-methyl-5-(4-methylphenyl)- (9CI) (CA INDEX NAME)



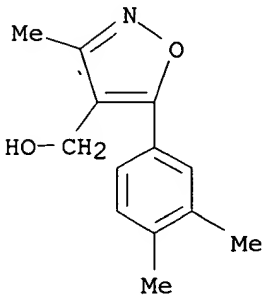
RN 113841-95-5 HCAPLUS
CN 4-Isoxazolemethanol, 5-(4-methoxyphenyl)-3-methyl- (9CI) (CA INDEX NAME)



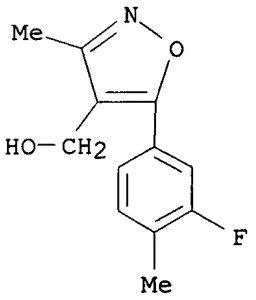
RN 113841-96-6 HCAPLUS
CN 4-Isoxazolemethanol, 5-(4-chlorophenyl)-3-methyl- (9CI) (CA INDEX NAME)



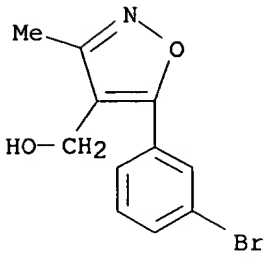
RN 113841-97-7 HCAPLUS
CN 4-Isoxazolemethanol, 5-(3,4-dimethylphenyl)-3-methyl- (9CI) (CA INDEX NAME)



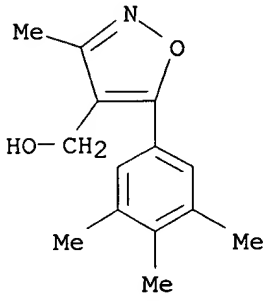
RN 113841-98-8 HCAPLUS
CN 4-Isoxazolemethanol, 5-(3-fluoro-4-methylphenyl)-3-methyl- (9CI) (CA INDEX NAME)



RN 113841-99-9 HCAPLUS
CN 4-Isoxazolemethanol, 5-(3-bromophenyl)-3-methyl- (9CI) (CA INDEX NAME)



RN 113842-00-5 HCAPLUS
CN 4-Isoxazolemethanol, 3-methyl-5-(3,4,5-trimethylphenyl)- (9CI) (CA INDEX NAME)



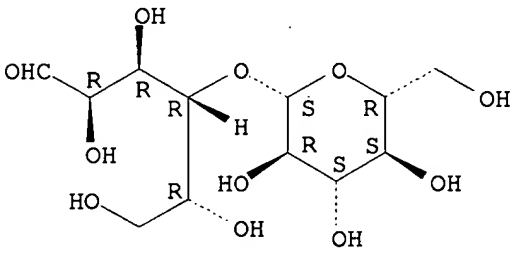
L18 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1988:108556 HCAPLUS
DN 108:108556
TI .beta.-Glucosidases from cellulolytic fungi Aspergillus terreus, Geotrichum candidum and Trichoderma longibrachiatum as typical glycosidases
AU Rodionova, N. A.; Tavobilov, I. M.; Martinovich, L. I.; Buachidze, T. Sh.; Kvesitadze, G. I.; Bezborodov, A. M.
CS A. N. Bakh Inst. Biochem., Moscow, 117071, USSR
SO Biotechnol. Appl. Biochem. (1987), 9(3), 239-50
CODEN: BABIEC; ISSN: 0885-4513
DT Journal
LA English
AB By EtOH pptn. and chromatog. on Sephadex SP, DEAE (or DEAE-**cellulose**), and G-200, .beta.-glucosidases (EC 3.2.1.21) were isolated from the culture filtrates of the cellulolytic fungi A. terreus, G. candidum, and T. longibrachiatum grown on medium with **cellulose** -contg. materials. The enzymes were purified to homogeneity. The substrate specificities of the enzymes were studied. The .beta.-glucosidases had higher affinity for p-nitrophenyl-.beta.-D-glucopyranoside than for cellobiose (Km values of 1.25, 0.34, 0.20, and 5.4, 2.0, 1.2 mM, resp., for the A. terreus, G. candidum, and T. longibrachiatum enzymes) and were able to hydrolyze both laminaribiose and gentiobiose, but were unable to cleave cotton fiber, **carboxymethylcellulose**, and other glycans to reducing sugars. The enzymes also showed transglycosylase activity. Ki Values for the arylglucosidase activity of .beta.-glucosidases from A. terreus, G. canidum, and T. longibrachiatum in the presence of glucose or glucono-1,5-

**lactone** were 12.2, 6.0, 2.1 and 0.20, 0.19, 0.07 mM, resp. The mol. wts. of the enzymes of the 3 species were estd. by gel filtration and by sedimentation equil. centrifugation to be 200,000, 200,000, and 350,000, resp. The pI values of the .beta.-glucosidases were 4.8, 5.9, and 4.2, resp. The optimum temps. and pH values were 60, 50, and 50.degree. and 4.5, 4.5, and 4.8-5.7, resp. These properties appear to relate the .beta.-glucosidases obtained in the present study to typical glycosidases.

IT **9001-22-3P**, .beta.-Glucosidase
RL: **PREP (Preparation)**
(of cellulolytic fungi, purifn. and properties of)
RN 9001-22-3 HCAPLUS
CN Glucosidase, .beta.- (9CI) (CA INDEX NAME)

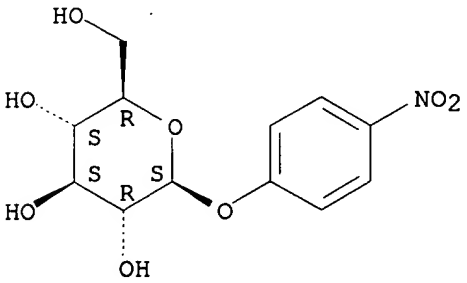
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **528-50-7**, Cellobiose **2492-87-7**, p-Nitrophenyl-.beta.-D-glucopyranoside
RL: RCT (Reactant)
(reaction of, with .beta.-glucosidase of cellulolytic fungi, kinetics of)
RN 528-50-7 HCAPLUS
CN D-Glucose, 4-O-.beta.-D-glucopyranosyl- (6CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 2492-87-7 HCAPLUS
CN .beta.-D-Glucopyranoside, 4-nitrophenyl (9CI) (CA INDEX NAME)

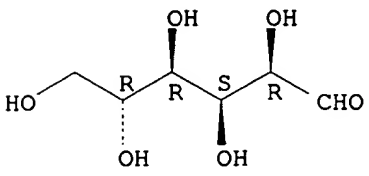
Absolute stereochemistry.



IT **50-99-7**, Glucose, biological studies **90-80-2**, Glucono-1,5-lactone
RL: BIOL (Biological study)
(.beta.-glucosidase of cellulolytic fungi inhibition by, kinetics of)

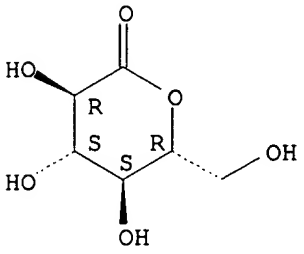
RN 50-99-7 HCAPLUS
CN D-Glucose (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.




RN 90-80-2 HCAPLUS
CN D-Gluconic acid, .delta.-lactone (9CI) (CA INDEX NAME)

Absolute stereochemistry.




L18 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1986:197096 HCAPLUS
DN 104:197096
TI Solvent for the dye of a pressure-sensitive recording paper
IN Kawakami, Shigenobu; Matsuzaka, Eiichi; Narui, Satoshi; Takahashi, Naoya
PA Nippon Petrochemicals Co., Ltd., Japan
SO Eur. Pat. Appl., 19 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | EP 166454 | A2 | 19860102 | EP 1985-108050 | 19850628 |
| | EP 166454 | A3 | 19870107 | | |
| | EP 166454 | B1 | 19890517 | | |
| | R: BE, DE, FR, GB, IT | | | | |
| | JP 61012389 | A2 | 19860120 | JP 1984-135540 | 19840629 |
| | JP 04027957 | B4 | 19920513 | | |
| | US 4661165 | A | 19870428 | US 1985-745909 | 19850618 |
| | CA 1241668 | A1 | 19880906 | CA 1985-484440 | 19850619 |
| | ES 544691 | A1 | 19860901 | ES 1985-544691 | 19850628 |
| PRAI | JP 1984-135540 | | 19840629 | | |

AB A solvent comprising a fraction having a b.p. of 270-350.degree. which is prepd. by distg. the heavier products obtained from the process for producing ethyltoluene by alkylating PhMe with ethylene in the presence of a synthetic zeolite catalyst is used in the making of a colorless dye

precursor soln. during its microencapsulation for the prepn. of pressure-sensitive recording paper. Thus, PhMe was alkylated with ethylene at 450.degree. in the presence of the synthetic zeolite ZSM-5 [H+-type, SiO2/Al2O3 (mol. ratio) = 60]. The heavier products were distd. under reduced pressure to obtain a fraction having a b.p. of 275-320.degree. and mainly comprising diarylalkanes. Crystal violet **lactone** 5 g was dissolved in the fraction 100 g, gelatin added, microencapsulated with **carboxymethylcellulose** and glutaraldehyde, coated on a paper support to give a pressure-sensitive recording paper which was used with an activated clay-coated developing paper to give blue images with improved d. as compared to a control using a solvent prepd. from ethylene and C6H6.

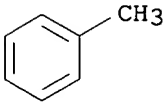
IT **74-85-1**, reactions
RL: RCT (Reactant)
(alkylation of toluene by, diarylalkane solvents from, for leuco dyes for pressure-sensitive copying paper)

RN 74-85-1 HCAPLUS
CN Ethene (9CI) (CA INDEX NAME)

$H_2C{=}CH_2$

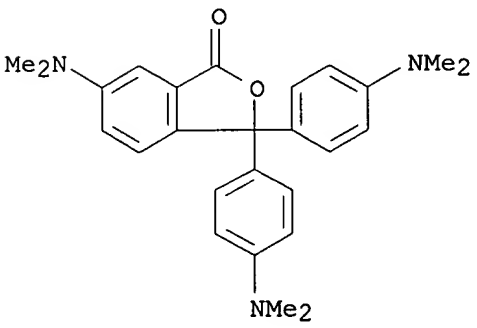
IT **108-88-3**, reactions
RL: RCT (Reactant)
(alkylation of, by ethylene, biarylalkane solvents from, for leuco dyes for pressure-sensitive copying paper)

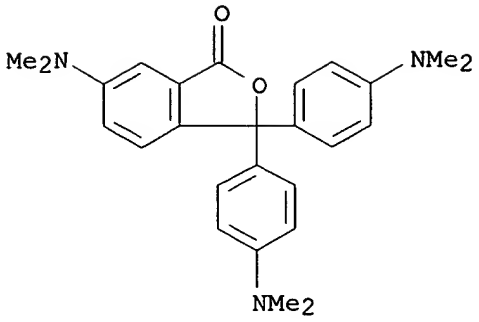
RN 108-88-3 HCAPLUS
CN Benzene, methyl- (9CI) (CA INDEX NAME)



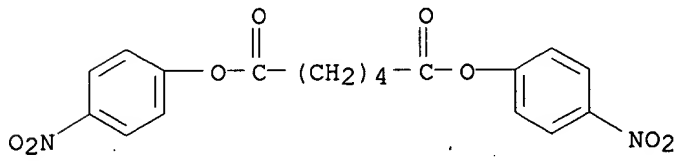

IT **1552-42-7**
RL: USES (Uses)
(microencapsulated color-forming soln. contg., in diarylalkanes for pressure-sensitive copying papers)

RN 1552-42-7 HCAPLUS
CN 1(3H)-Isobenzofuranone, 6-(dimethylamino)-3,3-bis[4-(dimethylamino)phenyl]- (9CI) (CA INDEX NAME)





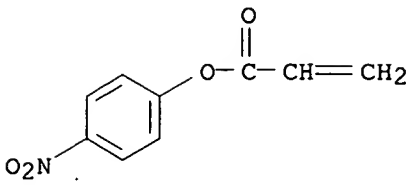
L18 ANSWER 9 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1978:510181 HCAPLUS
DN 89:110181
TI Chemical synthesis of branched polysaccharides, 6. Binding of mono-, di- and oligosaccharides to various carriers via amide linkage
AU Emmerling, Winfried N.; Pfannemueller, Beate
CS Inst. Makromol. Chem., Univ. Freiburg, Freiburg/Br., Ger.
SO Makromol. Chem. (1978), 179(6), 1627-33
CODEN: MACEAK; ISSN: 0025-116X
DT Journal
LA English
AB Carriers having either carboxylic or amino groups including polyfunctional low mol. wt. substances, synthetic polymers, and biopolymers were condensed with sugars with either amino or carboxylic end groups to give carbohydrates with amide linkages. Among the carriers used were adipic acid, **carboxymethylamylose**, poly(acrylic acid), NH2(CH2)nNH2 (n = 2,6,8,10), and poly(L-lysine); the acid carriers were used, in the condensation reaction, as p-nitrophenyl esters. The amino or carboxy sugars used in the condensation were derived from glucose, maltose, or **maltooligosaccharides**. Thus, an aldonic acid **lactone**, derived from a glucopyranose, was condensed with NH2(CH2)2NH2 to give N-(2-aminoethyl)amide of aldonic acid, which was treated with p-nitrophenyl adipate to give a coupled product (C22H42N4O14).
IT **32564-25-3P 67391-52-0P 67400-19-5P**
**67400-20-8P 67426-85-1P 67426-86-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); **PREP (Preparation)**
(prepn. and reaction of, with 2-aminoethylamide of adipic acid)
RN 32564-25-3 HCAPLUS
CN Hexanedioic acid, bis(4-nitrophenyl) ester (9CI) (CA INDEX NAME)



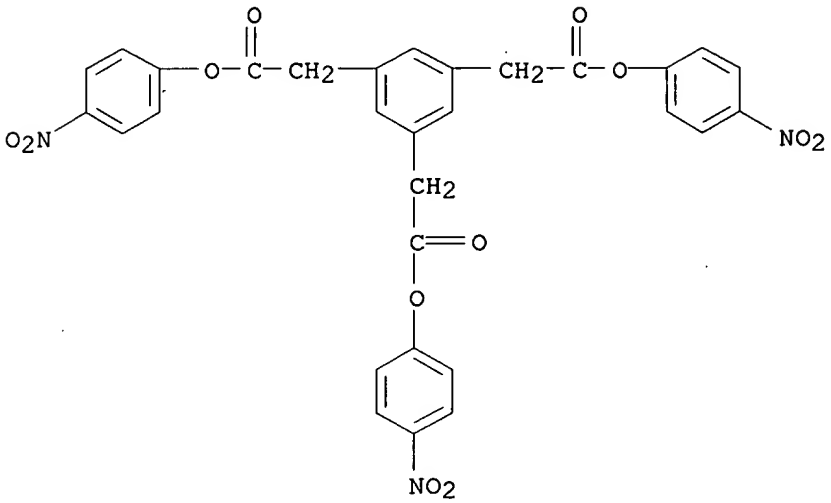
RN 67391-52-0 HCAPLUS
CN 2-Propenoic acid, 4-nitrophenyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

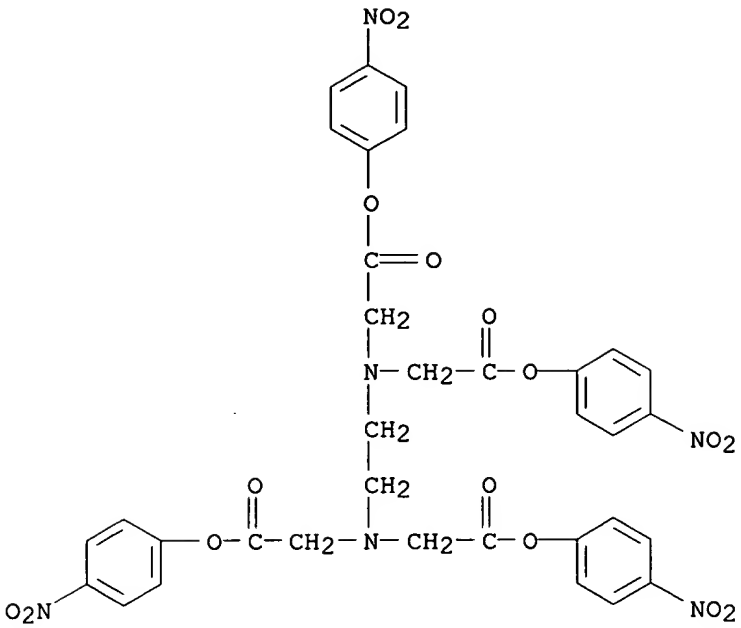
CRN 2123-85-5
CMF C9 H7 N O4



RN 67400-19-5 HCAPLUS
CN 1,3,5-Benzenetriacetic acid, tris(4-nitrophenyl) ester (9CI) (CA INDEX NAME)



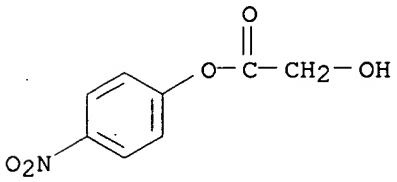
RN 67400-20-8 HCAPLUS
CN Glycine, N,N'-1,2-ethanediylbis[N-[2-(4-nitrophenoxy)-2-oxoethyl]-, bis(4-nitrophenyl) ester (9CI) (CA INDEX NAME)



RN 67426-85-1 HCAPLUS
CN Amylose, 2-(4-nitrophenoxy)-2-oxoethyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 15396-81-3
CMF C8 H7 N O5



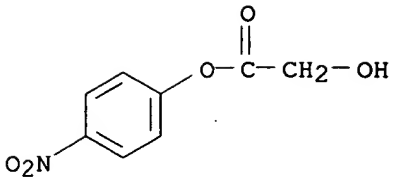
CM 2

CRN 9005-82-7
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 67426-86-2 HCAPLUS
CN Cellulose, 2-(4-nitrophenoxy)-2-oxoethyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 15396-81-3
CMF C8 H7 N O5



CM 2

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **124-09-4DP**, reaction products with aldonic acid lactones
**373-44-4DP**, reaction products with aldonic acid lactones
**646-25-3DP**, reaction products with aldonic acid lactones
**25104-18-1DP**, reaction products with aldonic acid lactones
RL: SPN (Synthetic preparation); **PREP (Preparation)**
(prepn. of)
RN 124-09-4 HCAPLUS
CN 1,6-Hexanediamine (7CI, 8CI, 9CI) (CA INDEX NAME)

$H_2N-(CH_2)_6-NH_2$

RN 373-44-4 HCAPLUS
CN 1,8-Octanediamine (6CI, 8CI, 9CI) (CA INDEX NAME)

$H_2N-(CH_2)_8-NH_2$

RN 646-25-3 HCAPLUS
CN 1,10-Decanediamine (6CI, 8CI, 9CI) (CA INDEX NAME)

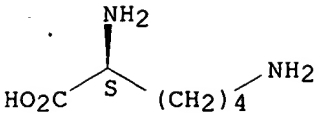
$H_2N-(CH_2)_{10}-NH_2$

RN 25104-18-1 HCAPLUS
CN L-Lysine, homopolymer (9CI) (CA INDEX NAME)

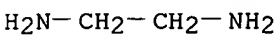
CM 1

CRN 56-87-1
CMF C6 H14 N2 O2
CDES 5:L

Absolute stereochemistry.

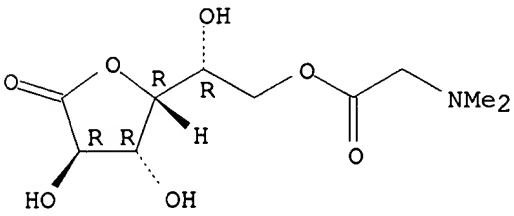


IT **107-15-3D**, reaction products with aldonic acid lactones
RL: RCT (Reactant)
(reaction of, with nitrophenyl carboxylates)
RN 107-15-3 HCAPLUS
CN 1,2-Ethanediamine (9CI) (CA INDEX NAME)



L18 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1975:579446 HCAPLUS
DN 83:179446
TI Synthesis of 6-O-dimethylglycyl-D-glucono-1,4-lactone (pangamolactone) and its salts
AU Murase, Kiyoshi; Murakami, Masuo
CS Kawanouchi Cent. Res. Lab., Tokyo, Japan
SO Yamanouchi Seiyaku Kenkyu Hokoku (1974), 2, 62-5
CODEN: YSKHDO
DT Journal
LA Japanese
AB D-glucono-1,4-**lactone** 3,5-phenylborate (I, R = H), prepd. by heating D-glucono-1,4-**lactone** with triphenylboroxal in methylcellosolve, was condensed with Me2NCH2CO2H-HCl to give I R = COCH2NMe2.cntdot.HCl, which was treated with (HOCH2)2CH2 to give **pangamolactone** (II). II **cellulose** acetate phthalate and II **carboxymethylcellulose** were also prepd.
IT **16820-88-5P 29031-21-8P 29031-22-9P 57074-71-2P 57074-72-3P 57328-12-8P 57372-71-1P**
RL: SPN (Synthetic preparation); **PREP (Preparation)**
(prepn. of)
RN 16820-88-5 HCAPLUS
CN D-Gluconic acid, .gamma.-lactone, 6-ester with N,N-dimethylglycine, hydrochloride (9CI) (CA INDEX NAME)

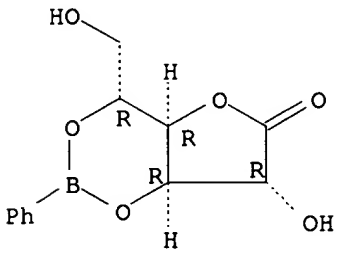
Absolute stereochemistry.



● HCl

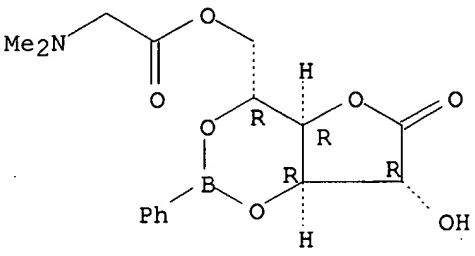
RN 29031-21-8 HCAPLUS
CN D-Gluconic acid, .gamma.-lactone, cyclic 3,5-(phenylboronate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 29031-22-9 HCAPLUS
CN D-Gluconic acid, .gamma.-lactone, cyclic 3,5-(phenylboronate), 6-ester with N,N-dimethylglycine, hydrochloride (9CI) (CA INDEX NAME)

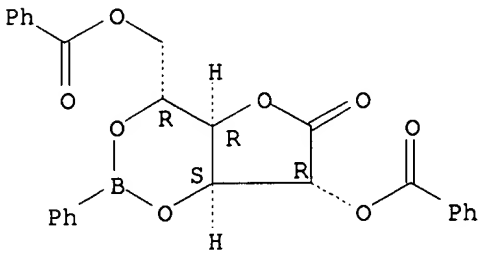
Absolute stereochemistry.



● HCl

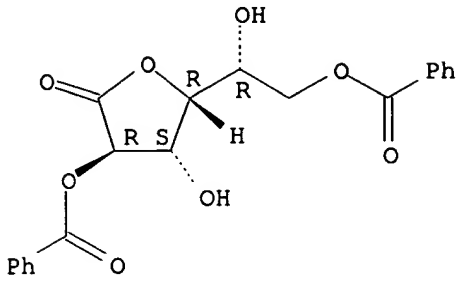
RN 57074-71-2 HCAPLUS
CN D-Gluconic acid, .gamma.-lactone, cyclic 3,5-(phenylboronate) 2,6-dibenzoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 57074-72-3 HCAPLUS
CN D-Gluconic acid, .gamma.-lactone, 2,6-dibenzoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

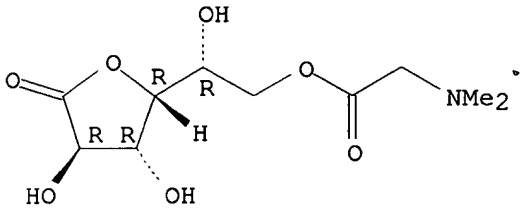


RN 57328-12-8 HCAPLUS
CN D-Gluconic acid, .gamma.-lactone, 6-ester with N,N-dimethylglycine, compd. with cellulose carboxymethyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 34044-40-1
CMF C10 H17 N O7
CDES 5:D-GLUCO

Absolute stereochemistry.



CM 2

CRN 9000-11-7
CMF C2 H4 O3 . x Unspecified
CDES 8:GD,ETHER

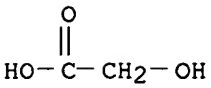
CM 3

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

CRN 79-14-1
CMF C2 H4 O3

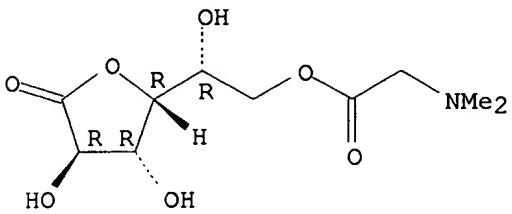


RN 57372-71-1 HCAPLUS
CN D-Gluconic acid, .gamma.-lactone, 6-ester with N,N-dimethylglycine, compd. with cellulose acetate hydrogen 1,2-benzenedicarboxylate (9CI) (CA INDEX NAME)

CM 1

CRN 34044-40-1
CMF C10 H17 N O7
CDES 5:D-GLUCO

Absolute stereochemistry.



CM 2

CRN 9004-38-0
CMF C8 H6 O4 . x C2 H4 O2 . x Unspecified
CDES 8:GD1

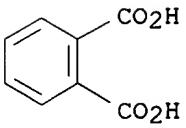
CM 3

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

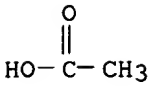
CM 4

CRN 88-99-3
CMF C8 H6 O4

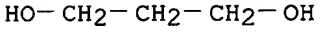


CM 5

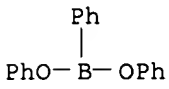
CRN 64-19-7
CMF C2 H4 O2



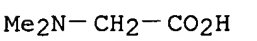
IT **504-63-2**
RL: RCT (Reactant)
(reaction with (dimethylglycyl)gluconolactone phenylboronate)
RN 504-63-2 HCAPLUS
CN 1,3-Propanediol (8CI, 9CI) (CA INDEX NAME)



IT **2938-75-2**
RL: RCT (Reactant)
(reaction with gluconolactone)
RN 2938-75-2 HCAPLUS
CN Boronic acid, phenyl-, diphenyl ester (9CI) (CA INDEX NAME)



IT **2491-06-7**
RL: RCT (Reactant)
(reaction with gluconolactone phenylboronate)
RN 2491-06-7 HCAPLUS
CN Glycine, N,N-dimethyl-, hydrochloride (6CI, 8CI, 9CI) (CA INDEX NAME)



IT **9004-32-4 57285-68-4**
RL: RCT (Reactant)
(reaction with pangamolactone)
RN 9004-32-4 HCAPLUS
CN Cellulose, carboxymethyl ether, sodium salt (8CI, 9CI) (CA INDEX NAME)

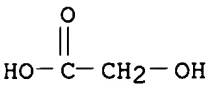
CM 1

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 79-14-1
CMF C2 H4 O3



RN 57285-68-4 HCAPLUS
CN Cellulose, acetate hydrogen 1,2-benzenedicarboxylate, lithium salt (9CI) (CA INDEX NAME)

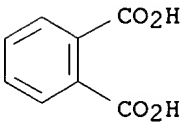
CM 1

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

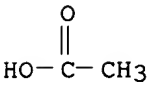
CM 2

CRN 88-99-3
CMF C8 H6 O4



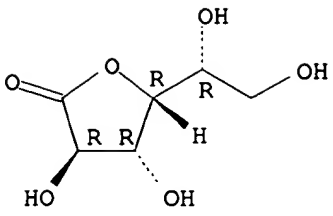
CM 3

CRN 64-19-7
CMF C2 H4 O2



IT **1198-69-2**
RL: RCT (Reactant)
(reaction with triphenylboroxal)
RN 1198-69-2 HCAPLUS
CN D-Gluconic acid, .gamma.-lactone (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L18 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2001 ACS
AN 1975:163069 HCAPLUS
DN 82:163069
TI Microcapsule dispersion for copying papers
IN Iwasaki, Hiroshi; Nishimoto, Yoshiyuki; Tada, Tomonori; Takekawa, Yasuo
PA Kanzaki Paper Mfg. Co., Ltd.
SO Ger. Offen., 18 pp.
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DT Patent
LA German
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| | JP 50005280 | A2 | 19750120 | JP 1973-55773 | 19730518 |
| | ZA 7403090 | A | 19750528 | ZA 1974-3090 | 19740514 |
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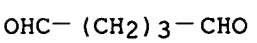
AB In the encapsulation of hydrophobic leuco dye solns. for self-contained or transfer copy-type papers capsules of superior resistivity to humidity, which can be hardened by aldehydes without adjustment of pH, can be obtained by use of hydrolyzed styrene-maleic anhydride co- or terpolymers in form of their NH4 salts. Per 100 parts hydrophilic colloids, such as gelatin or **carboxymethyl cellulose**, 10-200 parts of hydrolyzate is used with 5-500% of its wt. of a C1-3 mono- or C2-10 dialdehyde. Thus, a soln. of crystal violet **lactone** 2 and N-benzoylleucomethylene blue 1 g in isopropylbiphenyl 100 g of 60.degree. was dispersed to 4-5.mu. droplets in a soln. of acid-processed gelatin 30 g in water 470 g of 60.degree.. Next 10% aq. gum arabic 300 g and water 200 g, both of 60.degree., were added, a coacervate film formed by addn. of HOAc to pH 4.3 and the film gelled at 10.degree.. After addn. of pentanedial 10 g and 20% aq. hydrolysate 100 g the dispersion of pH 5.2 was coated on paper at 5 g/m2. After 20 hr at 50.degree. and 90% relative humidity the paper appeared unchanged and yielded clear copies.

IT **50-00-0**, uses and miscellaneous **111-30-8**
RL: USES (Uses)
(in microcapsule dispersion prepn. for copying papers of improve resistance to humidity)

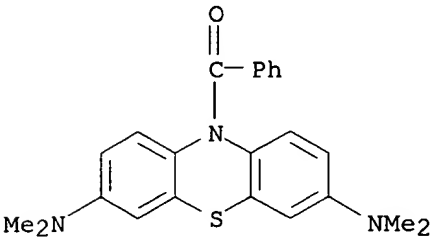
RN 50-00-0 HCAPLUS
CN Formaldehyde (8CI, 9CI) (CA INDEX NAME)

$H_2C{=}O$

RN 111-30-8 HCAPLUS
CN Pentanedial (9CI) (CA INDEX NAME)



IT **1249-97-4 1552-42-7**
RL: USES (Uses)
(microincapsulation of, hydrolyzed styrene-maleic anhydride polymer ammonium salts in, for copying papers of improved moisture resistance)
RN 1249-97-4 HCAPLUS
CN 10H-Phenothiazine-3,7-diamine, 10-benzoyl-N,N,N',N'-tetramethyl- (9CI) (CA INDEX NAME)



RN 1552-42-7 HCAPLUS
CN 1(3H)-Isobenzofuranone, 6-(dimethylamino)-3,3-bis[4-(dimethylamino)phenyl]- (9CI) (CA INDEX NAME)